

## **Raised Bed Vegetable Gardens & Square Foot or Block Layout Veg Gardening**

### **Square Foot or Block Layout**

Growing vegetables in 30cm (12in) square 'blocks' increases yields dramatically compared to the traditional row system.

The technique eliminates unnecessary walkways by planting vegetables closely together in blocks, instead of long single rows. You grow crops with an equal-distance spacing between plants in both directions.

It is a good idea to mark out the 30cm blocks using string or similar materials so you know exactly where to sow and plant.

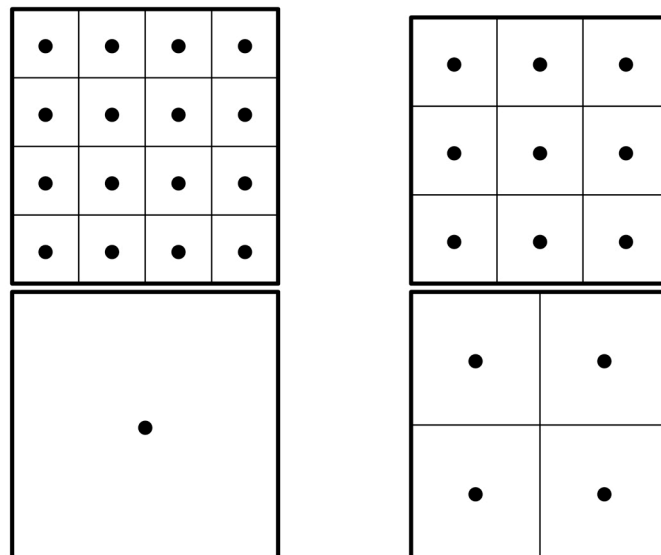
Due to the high plant density, block planting needs a weed-free, fertile, well-drained soil that is rich in organic matter. Careful attention to watering and regular, correct feeding is also essential to maintain the yields.

As a result, the best way to implement the square foot or block layout is to use raised beds

### **Plant spacing**

To calculate how many plants per square, look on the seed packet – just look at the plant spacing, ignore the row spacing:

- 30cm (12in) apart, 1 plant per square
- 15cm (6in) apart, 4 plants per square
- 10cm (4in) apart, 9 plants per square
- 7.5cm (3in) or less apart, 16 plants per square



## **Raised beds**

The best size for the beds is 1.2m (4ft) wide and any desired length; although anything greater than 2.4m (8ft) long can be cumbersome, so make a series of shorter beds rather than longer ones. This width makes it easy to reach into the bed from walkways for sowing, planting, weeding and harvesting and so reduces soil compaction – which is vital for high yields.

Raised beds with square foot or block layouts have many advantages, including:

**Higher yields and less area to weed** The block layout eliminates unnecessary walkways and increases yields.

**Reduced soil compaction** Established walkways keep foot traffic off the bed, preventing soil compaction.

**Soil improvement** The raised bed is a clearly defined area where you can concentrate on soil improvement, by annual applications of organic matter. Also, where the natural soil is poor, good soil and compost mixes can be added to the bed.

**Earlier planting** The raised beds provide better drainage and allow the soil to warm up faster in spring. Beds can easily be covered with clear plastic or cloches to keep the soil dryer in a wet spring and so warm up the soil more quickly.

**Frost protection** The block layout is easy to cover with plastic or fleece in spring and autumn to provide frost protection.

**Architectural interest** Raised beds are an attractive garden feature.

**Accessible gardening** The raised beds are ideal for allowing people with limited mobility to garden.

## Constructing a raised bed

**Size** A bed 1.2m (4ft) wide is ideal for most vegetable crops, and allows you to reach the entire bed from the side without stepping on the soil.

**Depth** The height of the beds is generally of no consequence, providing the crops can root down into the soil below the bed. Generally, 15cm (6in) is good for most crops, but you can go to 23-30cm (9-12in) or even deeper if necessary, although you will need more soil/compost to fill them. Variations in heights (15cm, 20cm, 25cm, 30cm/6in, 8in, 10in, 12in) among different beds will help create an attractive feature.

Deeper beds are more suitable where the soil below is not good enough for crop growth. Deeper beds are also easier to manage.

**Materials** A simple way to construct a raised bed is to use treated timber of the correct size; 2-3.5cm (0.75-1.25in) thick is perfect.

Use galvanised screws to join the wood together to make your box. Square posts (5cm/2in) at each corner and along the length of longer beds will add to the rigidity.

Place the box frame on the soil and fill.

Numerous suppliers now sell a range of excellent pre-cut raised bed kits:

Access Garden Products, [www.garden-products.co.uk](http://www.garden-products.co.uk)

Bosmere, [www.bosmere.com](http://www.bosmere.com)

Botanico, [www.botanicogarden.co.uk](http://www.botanicogarden.co.uk)

Gardman, [www.gardman.co.uk](http://www.gardman.co.uk)

Garland Products, [www.garlandproducts.com](http://www.garlandproducts.com)

Harrod Horticultural, [www.harrodhorticultural.com](http://www.harrodhorticultural.com)

Haxnicks, [www.haxnicks.co.uk](http://www.haxnicks.co.uk)

Link-A-Bord, [www.linkabord.co.uk](http://www.linkabord.co.uk)

Marshalls, [www.marshalls-seeds.co.uk](http://www.marshalls-seeds.co.uk)

Parasene, [www.parasene.com](http://www.parasene.com)

**Soil** Where crops will root down into the soil below the bed, it may be beneficial to double dig the soil below the bed, mixing well-rotted organic matter into the soil.

Where crops will only root in the raised bed, a good soil mixed with plenty of well-rotted organic matter will be needed.

## **Gardening**

Due to the high plant population and high yields, raised beds need better than average soils and frequent watering and feeding. Concentrate on improving the soil with routine (annual or whenever the soil is free from crops) applications of organic matter.

**Weeding** Never allow weeds to become established and remove them as soon as possible.

**Mulching** Mulch beds to control weeds, conserve soil moisture, and regulate soil temperatures. Grass clippings make a great mulch when applied in thin layers (up to 6mm/0.25in thick), but any good garden compost, well-rotted manure etc will be suitable. Allow each layer to dry between applications. Do not use clippings from lawns treated with weedkillers or other pesticides for at least six weeks after application.

Wood/bark chips are great for mulching between the beds; 7.5-10cm (3-4in) of chips will minimise compaction. But do not mix wood/bark chips into the soil.

**Watering** Raised beds help conserve water and reduce the amount of water applied. They do need more frequent watering due to the high plant density, but they are more efficient, resulting in higher yields for the amount of water applied compared to traditional row culture.

Drip irrigation or soaker hose systems are well suited to raised beds.

**Feeding** Keep the soil and plants well fed, but don't overdo it, especially with high-nitrogen feeds later in the year.

**Frost protection** An advantage of raised beds is that they are easy to cover for protection from spring rains and frost, allowing for early planting. Covering in autumn will prolong the cropping period. Frost protection can give two to eight weeks on both ends of the growing season.