How to Build a Square Foot Garden

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Tools:

Drill (electric or cordless with charged battery)
Assorted drill bits
Screwdriver bit appropriate for the screws being used
Materials:

**Pressure treated lumber vs. conventional lumber:**

Pressure treated lumber manufactured since 2004 no longer use a form of arsenic to protect the lumber from insects. It is significantly less expensive than most other lumber available at the “Big Box” stores. If you wish to stain or paint treated lumber, you may have to wait up to six months for it to dry enough to stain or paint. Use care when sawing pressure treated lumber; wear an appropriate respirator and throw away sawdust and left over scraps in the trash. Do not try to recycle pressure treated lumber in a compost bin.

Conventional lumber has either natural resistance to pests and fungus (redwood, cedar and cypress) or no resistance to pests and fungus (pine, oak, and poplar). Staining and painting may be necessary for the wood to last more than a couple of years as a garden bed. Lining the inside of the garden bed with 6-mil black plastic may prolong the life of the lumber.

If you are uncomfortable with the belief that chemicals from the pressure treated boards will leach into the garden then use untreated pine lumber, cedar or cypress.

- 20 coarse-threaded 2-½” galvanized or treated deck screws
- 1 bag zinc plated bolts and nuts (#10 24x1") (for grid)
- 1 bag washers (#10) (for grid)

2 - 2"x10" pressure treated pine lumber 8-feet long. Have the lumber yard cut these boards into 4-foot lengths. If you are uncomfortable with the belief that chemical from the pressure treated boards will leach into the garden then use untreated pine lumber, cedar or cypress.

3 - ¼ “x1½” pressure treated pine lattice 8-feet long. Have the lumber yard cut these boards into 4-foot lengths. If you are uncomfortable with the belief that chemical from the pressure treated boards will leach into the garden then use untreated pine lumber, cedar or cypress.

1 - roll or piece of landscape fabric sufficiently large enough to cover the bottom of the Square Foot Garden. (You may substitute a 4’x4’ piece of corrugated cardboard for the landscape fabric.)
3 - ¼”x1½” pressure treated pine lattice 8-feet long. Have the lumber yard cut these boards into 4-foot lengths. These will become the grid of the square foot garden.

Assembly:

Pre-drill 4-5 holes in the side of both ends of two boards.
Using galvanized or treated deck screws, screw the boards together using the cordless drill with the appropriate screw driver bit.

Place the raised bed frame on level ground in an area that receives at least 6 hours of sun.

Cut ground cloth or corrugated cardboard to size and place into the bottom of the raised bed frame, overlapping and covering the ground (soil and weeds) completely.
**GRID:** It isn’t a Square Foot Garden without a grid to help you organize your garden.

Assemble the grid from the \( \frac{3}{4} ” \times 1 \frac{1}{2} ” \times 48” \) lattice. Use zinc plated, appropriate size bolts, nuts (#10 24x1”) and washers (#10) to complete the assembly.

1. **Gather materials**
2. Stack lattice pieces, and drill \( \frac{3}{4} ” \) holes starting in the center and working your way to the edge with a hole drilled at 12” from the center hole.
3. Lay out grid and place bolt, washer and nut in place where grid members cross; tighten finger tight.
4. With the bolts, nuts and washers in place, the grid can be folded up for storage when garden is shut down.
**Growing Media:**

Fill the Square Foot Garden with the best potting mix you can find or mix your own using the materials recommended by Mel Bartholomew, inventor of the Square Foot Garden; watering as you fill to ensure that the potting mix settles.

Potting mix usually comes in 2 cubic feet bags. You will need 13.5 cubic feet of potting mix (7 bags) to fill a 4’x4’x10” Square Foot Garden.

If you use “Mel’s Mix” (highly recommended), you will need 4.5 cubic feet of **peat moss**, 4.5 cubic feet of **coarse Vermiculite**, and 4.5 cubic feet of **blended compost** for a most excellent growing media for your future vegetables.

**Peat moss** may come in loose filled, 2 cubic foot bags or in 3.8 cubic feet compressed bales. The compressed bales will expand to twice their volume once removed from the bag and fluffed up.
Coarse Vermiculite may be difficult to find at the local garden center. So look to greenhouse and plant nursery suppliers as a source. It must be horticultural grade. In the central Florida area, BWI in Apopka, FL is such a place and the coarse vermiculite can be purchased in 4 cubic foot bags.

Blended compost may difficult to come by but not impossible. It is easy to blend your own. Composted cow manures, chicken manures and mushroom compost are easily obtained at most “big box” stores. Worm castings and bat guano are also welcome additions to arrive at five different composted materials that provide a broad spectrum of beneficial organisms and minor elements so critically needed for your future vegetables.
Place the raised bed frame on level ground in an area that receives at least 6 hours of sun, close to a water source and close to the house so your guests can see it.

For more information about Square Foot Gardening and growing vegetables in Florida, contact your County Extension Service Office.

Additional resource: The New Square Foot Gardening by Mel Bartholomew

(Photos courtesy Ed Thralls OC Master Gardener Coordinator 2010)