University of California UC Master Gardener Program of Sonoma County

Constructing a Raised Bed



There are several methods and materials for making a raised vegetable bed. Your choice will depend on your desire for how easy you want the project to be, your budget, and whether you have any design considerations, or making it "fit in" with anything--for example, if you have some rock walls in the area, you might want to match those.

A simple dry-laid (mortarless) stacked wall of fairly flat and squarish stones, 12-14 inches high, makes a lovely raised bed--but it is a pretty fair amount of work, and expensive if you have to buy the stone. Stacked concrete blocks can be used, but the aesthetic is pretty bad.

I've used railroad ties in the past, stacked two high and overlapping, with steel "L" brackets at the corners. They are sturdy, relatively inexpensive and make construction a snap. Some people say that they shouldn't be used because they may contain creosote that might leach into the planting soil. Certainly newer ties that are are still oozing black, sticky creosote or smell intensely should not be used. But after a few years the effect diminishes, and old, well-weathered ties should not injure plants. You canalways use a heavy platic liner between the ties and the soil.

Probably most raised beds are made with naturally rot-resistant lumbers, such as redwood or cedar, than anything. Pressure treated lumber is often used, especially for the support posts that go into the ground. Again, some alarmists have raised safety concerns, but studies done by Texas A&M Agricultural Extension Service showed insignificant movement of these compounds into surrounding soil, and concluded that pressure-treated lumber has no proven effect on plant growth or food safety.

Here's a simple project for making a wooden raised bed 4 feet wide by 8 feet long (multiples of 4 feet maximize the efficient use of lumber, since the standard length is 8 feet) and one foot high:

Materials:

2 - 6 ft redwood 4 x 4 (pressure treated if you want the bed to last longer)

6 - 8 ft redwood 2 x 6's

1 box 4" brass drywall screws

8 feet of 4' wide hardware cloth

Cut the 4 x 4's into 6 posts 18" in length (you'll have two leftover posts). Measure 12 inches from the end of each, and with a saw or hatchet, shave the last 6 inches on two sides to sharpen (this will go in the ground).

Lay out two posts on the ground 4 feet apart. Cut two 8' 2 x 6 into two 4' pieces, and lay two of

these side by side across the two posts, lining up the ends with the post edges, and the top with the post tops. Drill two pilot holes in each 2×6 , and then screw them to the posts using a driver-drill and the drywall screws (these have a very coarse thread, and drive easily, but hold well). Construct the other end in exactly the same way.

Place another post on the ground, and lay two of the 8' 2 x 6's out, on top of it, side-by-side and centered on the post, top edge level with post-top. Drill two pilot holes in each, and screw them into the post. Do the same again to create the other long side.

Stand one of the short ends upside down (pointed ends of posts in the air. Stand one of the sides upside down perpendicular to the end piece, touching its end, lining up the edges. Drill pilot holes and screw the side into the end post. You've just created an "L" shape, and half the raised bed. Do the same again to make the second "L". Place the two "L" shapes, still upside down touching in two places, to create a rectangle. Drill pilot holes in both unsecured ends, and screw the two pieces "L" shaped pieces together to create the box bed.

Flip the whole thing over, position where you want the bed, and drive the pointed stakes into the ground with a maul or sledge hammer, pounding in rotation a bit at a time on each post top. In other words, don't try and pound any one post all the way into the ground at once, but do each one a little bit at a time, in rotation.

Lay the hardware cloth (gopher protection) into the bed bottom, and then fill the bed with your desired soil mixture. Your raised bed is ready to plant.





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