INSTRUCTIONS FOR BUILDING A RAISED BED GARDEN KIT

(8 foot by 3 foot bed, 12 inches high)

Chester County FoodBank

MATERIALS

Lumber: cypress or cedar is recommended as it is more resistant to rotting, lasting 7-10 years. Avoid pressure treated lumber.

(2) 1" x 12" x 8' boards (long boards for sidewalls)

(2) 1" x 12" x 3' boards (short boards for ends)

(1) 1" x 8" x 3' board (center board)

(6) 16" stakes, pointed at one end (to stabilize corners and center board)

(12) 2.5 inch deck screws (for board to board)

(28) 2 inch deck screws (for board to stakes)

3/4 cubic yard of garden soil (screened topsoil/ compost mix)

Newspaper or cardboard (to line bottom of bed)

TOOLS

- Pencil and sharpie marker
- Drill
- Drill bit (7/64, for pilot holes)
- Star bit (for deck screws)
- Mallet/Hammer (for stakes)
- Measuring tape
- Shovels, wheel barrow, 5 gallon buckets, hard rake (for soil)
- Optional: Level, Pick ax, or hand pick

Tips for a successful build day

Choose a flat location—avoid slopes.

Schedule soil to be delivered the day before—cover with a large tarp and cinderblocks if rain is in the forecast.

Plan for teams of 2-3 adults per bed, or 2 adults and 2-6 children per bed.

Filling with soil takes 2-3 times longer than building.

Many hands make light work!

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Preparing your lumber

STEP 1: Arrange the long boards side by side. Locate the "tree rings" on the cut end of the boards. Flip the boards over so the grain or "tree rings" on the cut ends are cupping down and arched towards the ground like a rainbow. This will ensure your pilot holes are easy to locate on the outsides of the boards. This will also ensure that your boards will be "cupping" inwards when you assemble the beds—which will prevent the lumber from peeling away.

STEP 2: Measure & mark where to drill pilot holes on long boards. This will prevent the wood from splitting since screws will be so close to the edge. Take a 3 foot board and stand it on its end—place it right up against the edge of the long board. Use a pencil to draw a line to mark this "width" measurement on the long board. Complete this step at both ends of all your long boards. Use a sharpie to make 3 marks where the pilot holes will go. One at the top, middle and bottom. Now that you have estimated the correct placement for the screws you may drill the pilot holes, using the drill bit.

STEP 3: Position (2) long boards for the sidewalls and place (2) short boards at each end **in between** the long boards. Place the cross-bracing board **in between** the 2 long boards as well to make sure you have correct placement. Adjust if needed. Make sure the grain/tree rings on **ALL** boards are cupping in towards the inside of the bed. Otherwise the boards will "peel away" over time. Below: Make sure the outer face edges are flush. You have the option to make the top edges flush, but you may need to trench the ground to make some boards flush with the ground. If the frame is not flush with the ground soil will leak out of the bottom of the bed.

Outer face edges:

Incorrect—not flush

Correct—flush

Top edges not flush

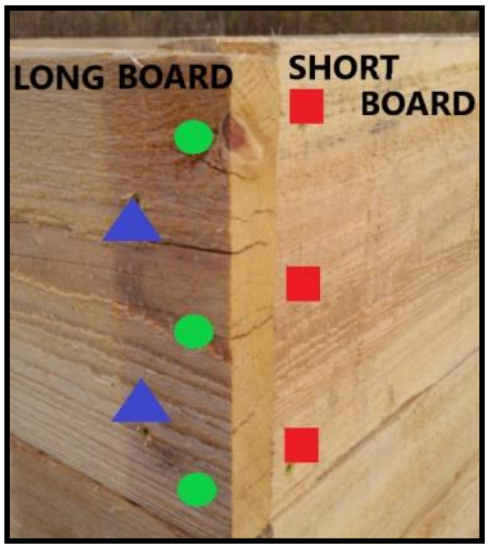
Top edges flush

STEP 4: Build the frame. Using the star driver bit use the pilot holes as a guide to screw the boards together with the 2.5 inch screws in three places: top, middle, and bottom. Repeat at the remaining 3 corners. Do not attach the cross bracing board yet.

Step 5: Set the frame into position. If needed, level the ground under the boards so the lumber makes full contact with the ground all the way around. Avoid gaps between the frame and the ground to prevent soil from leaking out. You may need to use a pick ax, or shovel to dig a small trench. Use a level to ensure the boards are level, this will prevent soil from spilling out over the top during rainstorms.

STEP 6: Install 4 corner stakes—Use a mallet to insert a stake in each corner. The flat top of the stake should be flush with the top of the bed. The pointy end of the stake goes into the ground. The purpose of the stakes is to brace the bed, and reinforce the corners NOT necessarily to pin the bed to the ground. You may find that the stake does not go very far in the ground, but is flush with the top of the bed. This is good. The post should be as flush as possible to both walls. If one board is higher then make the stake flush to the higher board. Try your best to make sure there is no gap between the stake and each side wall.

STEP 7: Secure the 4 corner stakes with screws



Use the 2 inch screws (to avoid sharp ends protruding through the stake). Attach both boards to the post. Stagger the screws to avoid hitting perpendicular screws that are already in place. **See photo.** The **GREEN CIRCLES** represent the 3 screws that are already in place, connecting the long board to the short board. Add 2 staggered screws on this face, represented by the **BLUE TRIANGLES**. These will connect the board to the stake. Repeat at each corner.

See photo. Now add 3 screws (represented by the **RED SQUARES**) on the short board face that currently has no screws. You will place these screws slightly above or below the "green circle" screws on the opposite face. These will connect the board to the stake. Repeat at each corner. Securing the bed to the stakes is important to prevent your bed from falling apart over time.

STEP 8: Install 1 cross bracing board and 2 stakes— With the measuring tape, find the halfway point (4 feet) on both long sides of the bed. Mark with a pencil. Place the 3' x 8" cross-bracing board in the middle of the bed; parallel to the short end boards. You may need to tap it into place with a hammer or mallet. The center board should hover as centered as possible between the top of the bed and the ground. It is not intended to be flush with the top. Insert a stake on alternate sides of the cross-bracing board.

Make the tops of the stakes flush with the top of the bed. **Secure the cross-bracing board to the stakes** with 2 screws for each stake, then secure both outer side boards to the stakes, using 2 screws per side board. You do not need to attach the side boards to the cross-bracing board.

FILL WITH SOIL—Once your raised bed is in place and secured, you are ready to fill it. Line the bottom with newspaper or cardboard, then add your topsoil/compost mix. You may tamp down the soil in the bottom half of the bed, but refrain from compacting the upper soil. Fill the bed completely, break up any clumps with the rake, and mound the soil higher than the bed. The soil will settle over time especially after rain. You should not be able to see the top of the center board.