



CARPENTER'S CORNER CONSTRUCTING A SCHOOL GARDEN

Congrats on making a great decision for the health of your school, students and community and deciding to build a school garden! If you haven't already developed your garden plan, check out the post, [School Gardens, Here We Grow](#), on our blog for a breakdown of how to make it happen.

Below are step-by-step plans, instructions, and supplies for two types of container gardens: a large raised garden bed and a garden buddy bench.

A few general tips before you get started building:

- Check with your local hardware store to see if they can donate materials, lumber and/or volunteers to help you out. Check with both locally-owned and big box stores—they're often able and happy to help, you just have to ask!
- Ask your volunteers to bring tools with them or borrow from the school or district to save you from buying them.
- Plan your build day well in advance, and make sure you have enough volunteers to help. The plans below note how many people are needed to construct one garden bed or bench in 3–4 hours.
- Think through what other logistics you need for your build day. In addition to the supplies listed below, you'll want to have water and healthy snacks on hand for your volunteers.
- Make sure you also have child care available so kids have something else to do while their grown-ups are using power tools. But once construction is complete, filling the beds with dirt and planting your gardens are great things for kids to come back and help with!
- If you're building at the school, make sure you work with the maintenance team so you know where to take trash, yard waste and any leftover lumber, paint, and supplies.



ACTION FOR HEALTHY KIDS 

Garden Buddy Bench Instructions

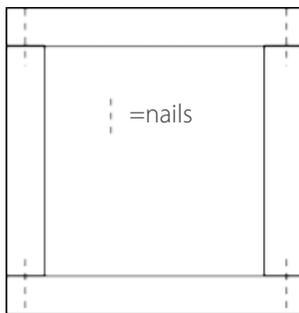
Supplies

- 1 bucket
- 5 pairs of work gloves
- 4 hammers
- 150 – 6" galvanized nails
- 40 – 3" nails
- 1 power drill with 6" long 3/16 drill bit
- Sand paper and 3 sanding sponges
- 2 garbage bags
- 5 – 40 lb. bags of potting soil
- 2 hand shovels
- Flowers
- Lumber (untreated):

Size	Length	Quantity
4x4	24"	28
4x4	31"	20
4x4	9.5"	42
4x4	96"	2
2x4	31"	14
1x4	22"	12

Instructions

- 1 Arrange 2 of the longer (31") and 2 of the shorter (24") 4x4s to form a square. Before nailing together with 6" nails, pre-drill through the long 4x4s first.
- 2 Assemble 10 of the square frames.

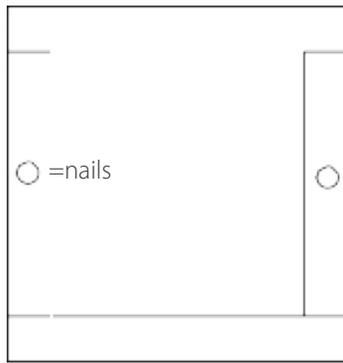


- 3 On two of the 10 square frames, place 2 additional 24" 4x4s inside the existing 4x4s. Nail them to the frame using the 6" nails (pre-drill first).



Garden Buddy Bench Instructions continued

- 4** Determine final placement of the planter bench as it cannot be moved after it is fully constructed. Adding one level at a time, pre-drill and nail each square frame to the level below, alternating the position of the squares to create a “notched” look for 3 levels:



Attach each square frame to the level below on two sides only; nail on alternate sides with each level added.

- 5** Use the frame constructed in step 3 for the 4th layer. Nail this frame to the box.
- 6** The 5th layer will contain the bench itself. Arrange and attach the short (9.5”), medium (24”) and long (96”) 4x4s to support the bench, like this: 
- 7** Evenly space 6 – 1x4s in each box to create a false bottom.
- 8** Place a garbage bag on top of the 1x4s to create a protective layer.
- 9** Attach the last two square frames on top of the bench layer.
- 10** Arrange and evenly space the 2x4s to create the bench surface and then attach using the 3” nails.
- 11** Paint or stain with exterior, waterproof paint or stain to protect the wood.
- 12** Fill the planters with potting soil and plant fruits and vegetables. Water thoroughly.



RAISED GARDEN BED (4'X8') INSTRUCTIONS

Please read ALL instruction steps before starting the project.

Supplies

- Brush, 3" – 3
- Bucket(s)
- Can opener – 1
- Garbage bags
- Hammer – 3
- Landscape fabric, 3'x50' – 1
- Latex gloves – 6 pairs
- Level – 1
- Lumber – see chart
- Mattock – 1
- Mulch, hardwood –½ cubic yd
- Nails, galvanized, 16d, 3½" – 100
- Paint, soy-based wood stain – 1 quart
- Paint stirrer – 1
- Pencil sharpener – 1
- Pencils – 3
- Plants/vegetables
- Plastic cups - 3
- Rags (box)
- Sanding sponges – 2
- Scissors – 2 pairs
- Shovel – 4
- Sod staples – 20
- Soil/compost mix – 1 yd³
- Staples, heavy duty, 1/4" – 100
- Staple gun – 2
- String
- Tamper – 1
- Tape measure – 1
- Wheel barrow – 1
- Work gloves, pair – 3

Lumber (untreated):

Label	Type	Size	Quantity
A	2x6	8'	4
B	2x6	4'	4
C	4x4	1.5'	4

CONSTRUCTION TIPS

- Grip your hammer close to the bottom of the handle to get more leverage.
- Measure and nail precisely as each group will have plenty of time to finish.
- Avoid splitting the wood by nailing as far away as possible from the edges of each piece.



Getting Started

- 1 Sort the lumber and clearly label each piece using the chart provided.
- 2 Create a supply station(s). Displaying the supplies will help with your task orientation and allow for easy access to the supplies.
- 3 Make sure that the garden bed locations have already been marked, or that the Project Manager has provided you with clear instructions for marking garden bed locations with string and stakes.

Instructions

- 1** Remove any existing weeds, roots and trash from entire bed area.
- 2** Check the flatness of the ground with level. If ground is flat, trench down one inch along the perimeter of the garden bed. If ground is not flat, you will level it by trenching down from the highest point.
- 3** Use the flat end of the mattock with a shallow shaving motion to create a trench 6" wide and 1" deep along the perimeter of the garden bed location. After the soil is loosened, use a flat edge spade to remove the loose soil. Check level before placing boards and posts in trench.
- 4** Secure the 8' (A) boards to the 4'x4' posts (C) with two nails per board. The bottom board should be flush with the bottom of the post; the top of the post extends about 7 in. above the top board.
- 5** Stand the long boards and attached posts on the ground, parallel to each other and 4 ft. apart. Nail the short boards to the posts. Note that the 2x6 boards do not overlap at the corners.
- 6** Apply one coat of stain to the garden bed. Let dry.
- 7** Unroll, cut, and arrange the landscape fabric so it lines the entire inside of the garden bed and the side walls. Use a tape measure to help if necessary. The fabric strips should overlap approximately 6".
- 8** Using a staple gun, staple the fabric along the inside upper edge of the bed. Smooth the fabric to entirely fill the corners and inside edges of the bed.
- 9** Push the sod staples into the fabric and ground along the inside perimeter of the bed. Also push sod staples approximately every 2' along the edges where the fabric overlaps.
- 10** Fill the bed completely with topsoil. Keep in mind the soil will compact greatly over time – the soil may rise above the height of the garden bed (this is fine).
- 11** Plant vegetables according to the instructions on the plant or seed packet.
- 12** Clean up your work area. Paint can be removed using soap and water. Return your tools to the designated area.



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