

Planter Box





TOOLS & MATERIALS

MATERIAL LIST

- 1"x 2" SPF or cedar lengths
- #8 1 1/4" decking screws (42 per planter)
- 1' x 4" SPF or cedar lengths

TOOL LIST

- Chop saw or handsaw
- Drill press
- 3/32" drill bit
- Sanding blocks
- Robertson driver bit for cordless drills
- Cordless drill
- Robertson hand screwdrivers

CUT LIST

Each planter will require:

- 4 1"x 2" x 13 ½" side rails
- $4 1'' \times 2'' \times 10 \frac{1}{2}$ side rails
- 12 1"x 4" x 11" side pieces
- 3 1"x 4" x 9" bottom pieces
- 2 1"x 4" x 12 ½" feet

Pre-drilling: for less experienced students some of the pieces can be pre-drilled using a 3/32" drill bit

- The long side rails should be drilled at 1.125", 3.25", 6.75", 10.25" and at 12.25"
- The short side rails should be drilled at 1.75", 5.25" and at 8.75"
- The feet should be drilled at 0.75", 3", 6.25", 10" and at 12"

PROCEDURE PART 1: THE SIDES

- 1 Lay three of the side pieces side by side on the workstation. Place one of the 10 ¾" side rails across the top of the side pieces.
- 2 While your partner holds the side pieces tight against the work station, screw the side rail to each of the side pieces with one screw.
- 3 Put a second short side rail across the bottom of three side pieces. Screw the side rail to each of the side pieces with one screw.
- 4 Repeat steps 2 and 3 to create a second short side.

- 5 Repeat steps 2 & 3 using the long side rails. When you put the long side rails across the three side pieces it should stick out evenly on either side. You can use the edge of the work station to determine how far it should stick out.
- 6 Repeat step 5 to create a second long side
- 7 Stand the four sides up, creating an open box. Screw the 2 sides with the long rails to the 2 sides with the short rails

PROCEDURE PART 2: THE BOTTOM

- 1 Lay three of the 9" bottom pieces side by side on the workstation.
- 2 Put one of the 12 ½" feet across the three bottom pieces. The ends should stick out approximately ½". You can line up the end of the foot with the pencil mark on the work station. While your partner holds the bottom pieces tight against the work station. Screw the foot to each of the bottom pieces with one screw.
- **3** Put the second foot across the three bottom pieces lining up the end with the pencil mark. Screw the foot into each of the three bottom pieces with one screw. You have now completed the bottom.
- 4 Slip the bottom into the opening of the box. You may need to tap the bottom until the two feet are both touching the sides.
- **5** Screw the feet to the box.

EXTENSION CHALLENGES

- 1 Build two planters out of different wood, do not apply finish, and observe how the different materials degrade over time during outdoor use. Example: red cedar vs maple.
- 2 Research a few different types of commonly grown garden plants, or speak to a gardener who might want to use a planter you build, and customize your planter depending on the depth of soil required, the amount of drainage required, etc.
- 3 Research types of trellises and build an addition on your planter to accommodate sweet peas, runner beans, or any type of vine that requires support.