## Planter Boxes



Decorating a garden is much like decorating a room in your home-it's nice to have pieces that are adaptable enough that you can move them around occasionally and create a completely new look. After all, most of us can't buy new furniture every time we get tired of the way our living rooms look. And we can't build or buy new garden furnishings every time we want to rearrange the garden.

That's one of the reasons this trio of planter boxes works so well. in addition to being handsome especially when flowers are bursting out of them they're incredibly adaptable. You can follow these plans to build a terrific trio of planter boxes that will go well with each other and will complement most gardens, patios, and decks. Or you can tailor the plans to suit your needs. For instance, you may want three boxes that are exactly the same size. Or you might want to build several more and use them as a border that encloses a patio or frames a terraced area.

Whatever the dimensions of the boxes, the basic construction steps are the same. If you decide to alter the designs, take a little time to figure out the new dimensions and sketch plans. Then devise a new cutting list and do some planning so you can make efficient use of your wood. To save cutting time, clamp together parts that are the same size and shape, and cut them as a group (called gang cutting). When your planter boxes have worn out their welcome in one spot, you can easily move them to another, perhaps with a fresh coat of stain and new plantings. You can even use the taller boxes to showcase outdoor relief sculptures-a kind of alfresco sculpture gallery.

## Box Planter



This planter is large enough to hold a potted shrub, mixed flowers or even a miniature herb garden. The "tiered" construction process makes it both easy to build and sturdy enough for years of use.

## Everything You Need:

Materials:
2 1/2" gold-colored deck screws (120)
10d casing nails (10)

## Directions: Box Planter

| CONSTRUCTION MATERIALS |  |
| :---: | :---: |
| Quantity | Lumber |
| 8 | $2 \times 4^{\prime \prime} \times 6^{\prime}$ <br> cedar |
| 3 | $2 \times 2^{\prime \prime} \times 6^{\prime}$ cedar |


| Cutting List |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Key | Part | Dimension | Pcs. | Material |
| A | Side | $11 / 2 \times 31 / 2 \times$ <br> $161 / 2^{\prime \prime}$ | 24 | Cedar |
| B | Stringer | $11 / 2 \times 11 / 2 \times$ <br> $211 / 2^{\prime \prime}$ | 4 | Cedar |
| C | Bottom <br> cleat | $11 / 2 \times 11 / 2 \times$ <br> $12^{\prime \prime}$ | 4 | Cedar |
| D | Bottom | $11 / 2 \times 31 / 2 \times$ <br> $143 / 4^{\prime \prime}$ | 3 | Cedar |
| E | Frame | $11 / 2 \times 31 / 2 \times$ <br> $183 / 4^{\prime \prime}$ | 4 | Cedar |
| F | Top cleat | $11 / 2 \times 11 / 2 \times$ <br> $131 / 4^{\prime \prime}$ | 4 | Cedar |

Note: Measurements reflect the actual thickness of dimensional lumber.

This planter is assembled upside down. The rows of side pieces, or tiers, are constructed independently, then stacked on top of each other and fastened together from the inside through the stringers.

1. Measure, mark and cut the side pieces (A) to length from $2 \times 4$ " cedar stock.
2. Drill a pair of $1 / 8^{\prime \prime}$ pilot holes through each side piece, about $3 / 4^{\prime \prime}$ from one end.
3. Form each of the six tiers by screwing four side pieces together with deck screws driven through the pilot holes.
4. Measure, mark and cut the stringers (B) to length.
5. Lay the first tier on a flat work surface, then position a stringer upright in one corner using a scrap of $2 \times 2$ " lumber as a spacer to raise the stringer off the work surface.

6. Drill $1 / 8^{\prime \prime}$ pilot holes and attach the stringer to the tier with $21 / 2^{\prime \prime}$ deck screws. Attach the other three stringers in the same fashion (photo A).
7. Add the remaining tiers one at a time, positioning each tier so the butt joints do not line up with those of the previous tier. Drill $1 / 8^{\prime \prime}$ pilot holes and attach each tier to the stringers with deck screws as you go.
8. Measure, mark and cut the bottom cleats (C) to length from $2 \times 2$ " cedar stock.
9. With the planter box still upside down, position a bottom cleat between two stringers, so the edge of the cleat is flush with the edge of the side.

10. Drill angled $1 / 8^{\prime \prime}$ pilot holes, and attach the bottom cleat to the side using deck screws. Attach the remaining bottom cleats in the same fashion (photo B).
11. Measure, mark and cut bottom pieces (D) to length from 2 $\times 4$ " cedar stock.
12. Turn the box assembly right-side-up, and set the bottom pieces into the planter so they rest on the cleats and are evenly spaced.
13. Attach the bottom pieces by drilling pilot holes and driving deck screws through the bottom pieces into the cleats.
14. Measure, mark and cut the frame pieces (E) from $2 \times 4$ " cedar stock, mitering the ends at $45^{\circ}$.
15. Dry-fit the frame pieces together, with the miter joints tight. Join the frame pieces with casing nails.
16. Cut top cleats (F) to size from $2 \times 2$ " cedar stock. Position the cleats on the assembled frame so the edges are flush with the inside edge of the framing pieces. Drill pilot holes through the cleats and attach by driving deck screws through the cleats into the frame.
17. Position the frame on the planter so the cleats fit tightly inside box. Attach the frame by drilling pilot holes and driving deck screws through the inside face of the top cleats.
18. Soften the corners and edges of the box planter with a rasp, then apply a finish of your choice; our planter is protected with a coat of clear sealant-preservative.

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## Everything You Need:

Tools: Tape measure,
Circular saw, Straightedge,
Drill, Finishing sander, Miter
box and backsaw, 8 ft . cedar
$1 \times 2 \mathrm{~s}(3), 8 \mathrm{ft}$. cedar $1 \times 4 \mathrm{~s}$ (6), $4 \times 8 \mathrm{ft}$. sheet of $5 / 8^{\prime \prime}$ fir siding, $2 \times 4 \mathrm{ft}$. piece $3 / 4$ "
CDX plywood, 1 1/4"
galvanized deck screws, 1
1/2" galvanized deck screws, 6d galvanized finish nails, Exterior wood stain,
Paintbrush.


## CUTTING LIST

| Ke |  | Front Bin Dimension | Pcs. | Middle Bin Dimension | Pcs. | Back Bin <br> Dimension |  | Materia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | End panel | $\begin{aligned} & 5 / 8 \times 15 \times 11 \\ & 1 / 8^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & 5 / 8 \times 15 \times 17 \\ & 1 / 8^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & 5 / 8 \times 15 \times 23 \\ & 1 / 8^{\prime} \end{aligned}$ | 2 | Sidi |
| B |  | $\begin{aligned} & 5 / 8 \times 221 / 4 \\ & \times 111 / 8^{\prime} \end{aligned}$ | 2 | $\text { x } 17 \text { 1/8' }$ | 2 | $\begin{aligned} & 3 / 8 \times 101 / 4 \\ & 231 / 8^{\prime} \end{aligned}$ | 2 | Siding |
| C |  | $\begin{aligned} & ' 7 / 8 \times 31 / 2 x \\ & 111 / 8^{\prime} \end{aligned}$ | 8 | $\begin{aligned} & 8 \times 31 / 2 \mathrm{x} \\ & 1 / 8 \end{aligned}$ | 8 | $\begin{aligned} & 8 \times 31 / 2 x \\ & 31 / 8 \end{aligned}$ | 8 | Ceda |
| D | tri | $9 \text { 1/4' }$ | 2 | $9 \text { 1/4' }$ | 2 | $\begin{aligned} & 7 / 8 \times 31 / 2 x \\ & 91 / 4^{\prime} \end{aligned}$ | 2 | Ceda |
| E | $\mathrm{Bo}$ | $\begin{aligned} & 7 / 8 \times 31 / 2 \mathrm{x} \\ & 17^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & \text { '7/8×3 } 1 / 2 x \\ & 5 \text { ' } \end{aligned}$ | 2 | $\begin{aligned} & 7 / 8 \times 31 / 2 x \\ & 5^{\prime} \end{aligned}$ | 2 | Ceda |
| I | Top cap | $\begin{aligned} & 7 / 8 \times 11 / 2 \mathrm{x} \\ & 18^{\prime} \end{aligned}$ | 2 | $18^{\prime}$ | 2 | $\begin{aligned} & 7 / 8 \times 111 / 2 \\ & \times 18^{\prime} \end{aligned}$ | 2 | Ceda |
| G | Top cap | $\begin{aligned} & 7 / 8 \times 11 / 2 \mathrm{x} \\ & 24^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & 7 / 8 \times 11 / 2 \mathrm{x} \\ & 12^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & 7 / 8 \times 11 / 2 x \\ & 12^{\prime} \end{aligned}$ | 2 | Ced |
| H | Bottom panel | $\begin{aligned} & 3 / 4 \times 141 / 2 \\ & \text { x } 191 / 2^{\prime} \end{aligned}$ | 1 | $\begin{aligned} & 3 / 4 \times 141 / 2 \\ & \text { x } 81 / 2^{\prime} \end{aligned}$ | 1 | $\begin{aligned} & 3 / 4 \times 141 / 2 \\ & \text { x } 81 / 2^{\prime} \end{aligned}$ | 1 | ywood |
| I | Cleat | $\begin{aligned} & ' 7 / 8 \times 11 / 2 x \\ & 122^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & ' 7 / 8 \times 11 / 2 x \\ & 122^{\prime} \end{aligned}$ | 2 | $\begin{aligned} & \text { '7/8× } 11 / 2 \mathrm{x} \\ & 12^{\prime} \end{aligned}$ | 2 | Cedar |

## DI MENSI ONS

## Front Bin Overall Size

| 12' High | 24' High |
| :--- | :--- |
| 18' Wide | 18' Wide |
| 24' Long | 12' Long |

## Middle Bin overall

Size
18' High
18' Wide
12' Long


## Step A: Make \&

 Assemble the Box Panels1. Following the cutting list, cut the end panels (A) and side panels ( B ), using a circular saw and a straightedge cutting guide.
2. Put one end panel facedown on your work surface, butting it up against the side panel, face-sideout. Mark positions and drill several counterbored 3/32" pilot holes in the side panel.
3. Fasten the side panel to the end panel with 1 1/2" deck screws. Repeat this process to fasten a second side panel to the end panel.
4. Put the remaining end panel face-down on the work surface. Take the assembled pieces and place the open end over the second end panel, side panels flush with the endpanel edges. Drill counterbored pilot holes in the side panels, and attach the side panels to the end panel, using deck screws.


## Step B: Attach the Trim

1. Cut the corner trim (C) to length. Overlap the edges of the corner trim pieces at the corner, forming a square butt joint. Fasten the corner trim pieces to the panels by driving 1 1/4" deck screws through the inside faces of the panels and into the corner pieces.
2. To provide extra support, drive screws or galvanized finish nails through the overlapping corner trim pieces and into the edges of the adjacent trim piece.
3. Cut the bottom trim pieces (D, E) to length. Fasten them to the end and side panels, between the corner trim pieces. Drive 1 1/4" deck screws through the side and end panels and into the bottom trim pieces.
4. Cut the top caps ( $F, G$ ) to length. Cut $45^{\circ}$ miters at both ends of one cap piece, using a miter box and back saw.
5. Tack the mitered cap piece to the top edge of the planter, with the outside edges flush with the outer edges of the corner trim pieces. For a proper fit, use this cap piece to guide the marking and cutting of the miters on the other cap pieces.
6. Miter both ends of each piece.

Tack it to the box so it makes a square corner with the previously installed piece. If the corners don't fit just right, loosen the pieces, and adjust them until everything is square.
7. Permanently attach all the cap pieces to the box, using 6d galvanized finish nails.


## Step C: I nstall the Box

 Bottom \& Finish the Planter1. Cut the cleats (I) to length and screw them to the end panels with 1 1/2" deck screws. On taller planters, it's best to mount the cleats higher on the panels so you won't need as much soil to fill the box-a savings in cost and weight. in that case, add cleats on the side panels for extra support.
2. Cut the bottom panel (H) to size from 3/4"-thick CDX plywood. Drill several 1"diameter weep holes in this panel. Set the panel onto the cleats-it does not need to be fastened in place.
3. Using a finishing sander, remove rough spots and splinters from all edges and surfaces. Apply two or three coats of exterior wood stain to all surfaces, and let the planter dry.

## Other related projects in this chapter include:

## How to Build Planter Boxes

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## Tips--Simplify Planting \& Maintenance <br> $\qquad$ $>$ <br> $\gg$

To help keep planter boxes from becoming discolored, line them with landscape fabric before adding soil. Simply cut a piece of fabric large enough to wrap the box as if you were gift-wrapping it, and then fold it to fit inside the box. Staple the fabric at the top of the box and trim off the excess. Add a 2 " layer of gravel, and then add potting soil and plants.

If your yard or garden is partially shaded, you may want to add wheels or casters to your planter boxes so you can move them to follow the sun; casters also make it easier to bring the planters indoors during cold weather. Be sure to use locking wheels or casters with brass or plastic housings.

If you're not experienced at arranging color combinations, start with a simple approach. Stay within the basic hot (red, yellow, and orange) or cool (blue, purple, and green) color families to create visual harmony. You can plant a collection of flowers and foliage in your favorite color or try combining a variety of hues of the same color. If you want to add contrast, add some plants in neutral tones.

Proportion, or the size and scale of plants in relationship to one another and the container, is another important component of successful plantings. In general, plant tall plants in large containers and low-lying plants in smaller ones. To achieve balance, use a dominant plant to establish a focal point, and then fill in around it with a combination of colors, textures, and shapes.

Before purchasing plants for any container, consider their preferred growing conditions. Grouping plants with similar soil, watering, and fertilization requirements simplifies your work during the growing season.

## Other related projects in this chapter include:

Tips--Simplify Planting \& Maintenance

