

BUILD IT WITH  
**REDWOOD**

Petaluma Planters



**R E D W O O D**

- Naturally beautiful
- Easy to use
- Practical and economical
- Durable and stable
- Resistant to decay and insects

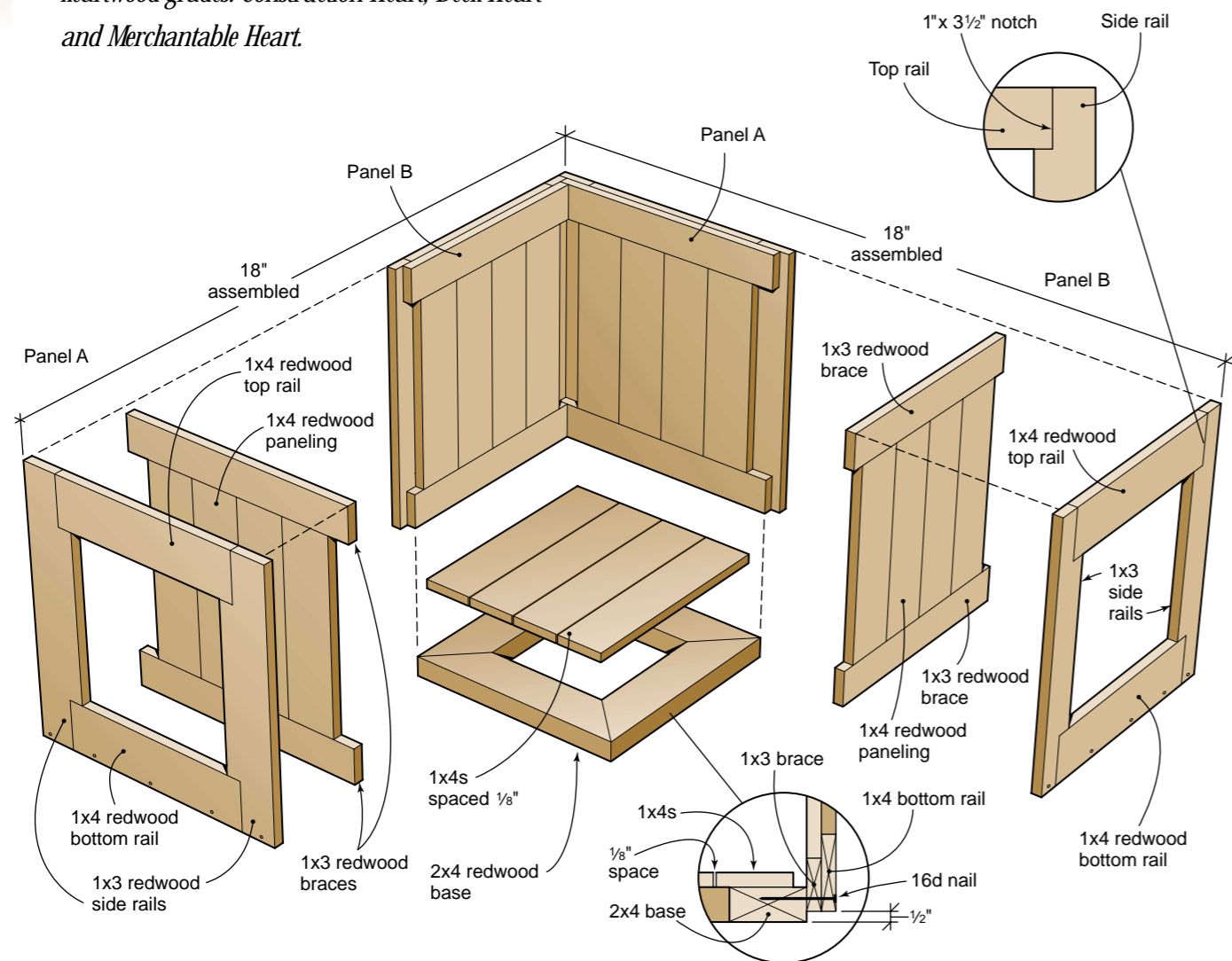
For quality planter boxes of all shapes and sizes, California redwood lumber provides outstanding endurance and rich beauty unmatched by other woods and planter materials. Redwood is easy to care for and easy to use. It is the ideal choice for simple and elegant patio and deck planter boxes.

Redwood lumber garden grades are available in a variety of appearances and prices. Construction Common, Deck Common, Merchantable and Merchantable Heart contain knots and sapwood. For a higher degree of decay resistance, use the all-heartwood grades: Construction Heart, Deck Heart and Merchantable Heart.

Redwood paneled planters are easy to assemble on a deck or patio or on an indoor workbench during winter months. They measure 18 inches square by 18 inches high including the base, and can be built to different lengths up to 4 feet without requiring additional bracing. Variations of the planter include the addition of a redwood butcherblock top to convert any length planter into a handsome storage bench, and horizontal, instead of vertical, panels. Plans for these are on the other side of this brochure.

Measure, mark and cut lumber as you build for best results. This design calls for 1x3 braces. You can easily trim down 1x4s if 1x3s are unavailable at your lumber yard. Remember to adjust the materials list to reflect this change.

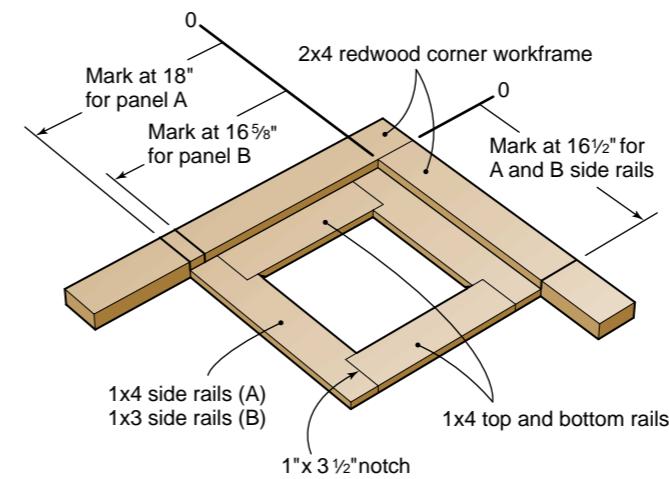
Use top quality hot-dipped galvanized nails or deck screws to prevent staining. Pre-drill nail holes near board ends to minimize splitting.



**1. Corner workframe** Nail together two long scrap 2x4s to form a square corner workframe. Secure it if possible to your work surface. Mark one workframe leg at 16 1/2 inches from inside the corner for the vertical rails.

Mark the other leg from the inside corner at 18 and 16 5/8 inches for panel A and panel B widths. For planters longer than 18 inches, subtract the thickness of two 1x4s to calculate the panel B measurement.

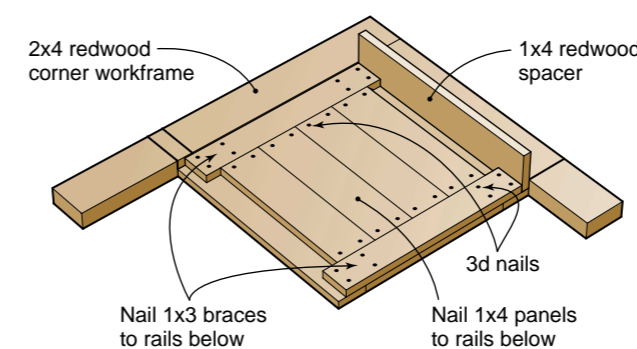
**2. Panel construction** Panels A and B are constructed similarly, but to different widths. Build the A panels first, using 1x4 side rails. Follow the same steps for B panels, but start with 1x3 side rails set to the B width marked on the workframe.



**Side rails** Trim four 1x4s and four 1x3s to 16 1/2 inches. Along the length at each end, mark and cut 90° notches, 1x3 1/2 inches.

**Top and bottom rails** Set notched side rails in the corner and at either the A or B panel marks of the workframe. Measure and cut four 1x4 top and bottom rails to fit between the notches for both A and B widths.

**Braces** On top of each side rail, set a 1x4 on edge. Measure and cut top and bottom braces to fit between the spacers. Set the trimmed braces on top of the rail assembly flush with top and bottom edges of rails.



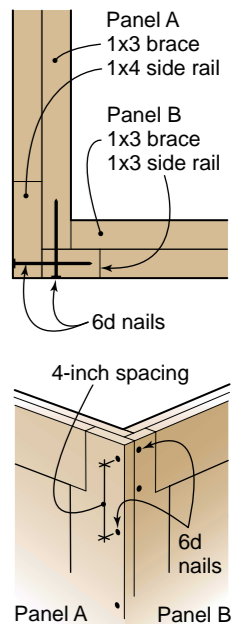
**Paneling** Measure and cut four 1x4s to fit flush between braces as shown for all panels. The boards should overlap rails by at least 1 inch on all sides.

Lay out rails, braces and paneling and use a carpenter's square to check for 90° corners. Attach the braces to the rails with four 3d nails or 1/4-inch screws in a square pattern at each end. For longer planters, additional nails or screws are needed every 10-12 inches. Attach 1x4 panels with two fasteners at each board end.

**3. Planter box assembly**

Drive 2-inch deck screws or 6d nails from panel A side rails to B side rails every four inches. Nail or screw through panel B side rails to panel A inside braces with just two nails each, at top and bottom corners.

**4. Base** Use a miter box to trim four 2x4s to 15 1/4 inches. Assemble the base using one 10d nail per corner. Install the base with 1/2 inch remaining below the planter box and drive five 16d nails or five 3 1/2-inch deck screws equally spaced per side through braces into the 2x4 base. Use one 6d nail per board to attach the 1x4 bottom pieces from the top. Allow 1/8-inch drainage spaces.



**Tools you will need** Carpenter's square, hammer, electric drill with Phillips head drill bit (for driving deck screws), twist drill bits, miter box and hand or power saw.

### Materials For Vertical Paneled Planter

|                          | Quantity | Size | Length               |
|--------------------------|----------|------|----------------------|
| Side rails (A)           | 4        | 1x4  | 16 1/2 inches        |
| Side rails (B)           | 4        | 1x3  | 16 1/2 inches        |
| Top and bottom rails (A) | 4        | 1x4  | 15 inches            |
| Top and bottom rails (B) | 4        | 1x4  | 13 5/8 inches        |
| Braces (A)               | 4        | 1x3  | 16 5/8 inches        |
| Braces (B)               | 4        | 1x3  | 15 1/4 inches        |
| Panels                   | 16       | 1x4  | 11 1/2 inches        |
| Bottom boards            | 4        | 1x4  | 15 1/4 inches        |
| Base, miter join         | 4        | 2x4  | 15 1/4 inches        |
| Nails                    |          |      | 3d, 6d, 10d, 16d     |
| Deck screws              |          |      | 1/4, 2, 3 1/2 inches |

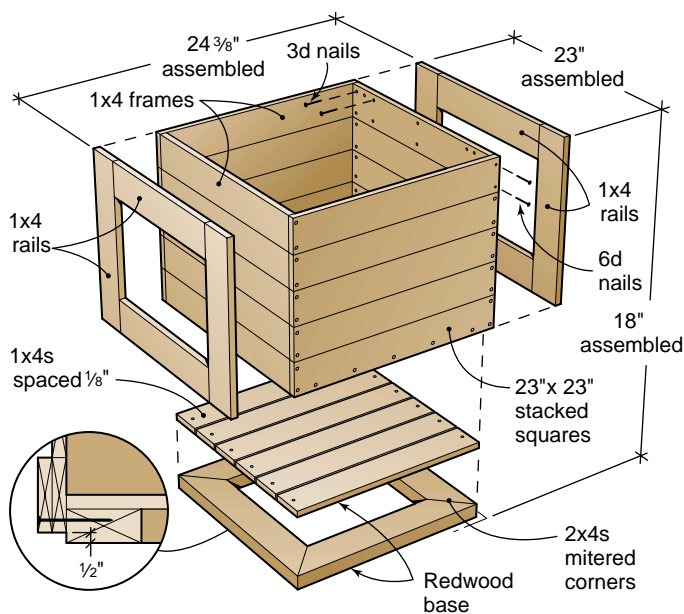


## HORIZONTAL PANELED PLANTER

This horizontal paneled planter calls for stacking square frames together to form planter sides, then attaching outer rails and base.

**1. Frames** Trim ten each 1x4 pieces to 21 $\frac{5}{8}$  inches and to 23 inches. Nail together five square frames with two 6d nails per board end, remembering to pre-drill nail holes. Stack frames to form planter sides.

**2. Rails** Cut side rails to match height of stacked frames. Cut top and bottom rails to fit. Attach all rails by nailing from inside the planter with 3d nails as shown.



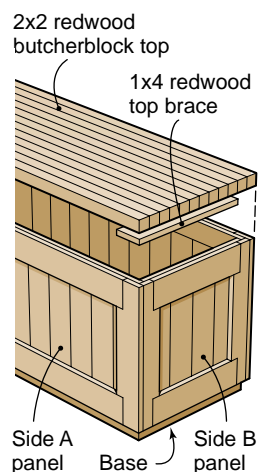
**3. Base** Miter or butt join four 2x4s to form a 21 $\frac{5}{8}$ -inch square base to fit inside the planter. Assemble with one 10d nail per corner. Cut six 1x4s to 21 inches and nail them to the 2x4 base, spaced  $\frac{1}{8}$  inch apart. Use one 6d nail at each board end. Insert assembled base into planter bottom and attach in the same way as described previously for the Vertical Paneled Planter base.

### Materials For Horizontal Paneled Planter

|                      | Quantity | Size                           | Length                  |
|----------------------|----------|--------------------------------|-------------------------|
| Frames               | 10       | 1x4                            | 23 inches               |
| Frames               | 10       | 1x4                            | 21 $\frac{5}{8}$        |
| Side rails           | 4        | 1x4                            | 17 $\frac{1}{2}$ inches |
| Top and bottom rails | 4        | 1x4                            | 16 inches               |
| Bottom boards        | 6        | 1x4                            | 21 $\frac{5}{8}$ inches |
| Base, miter join     | 4        | 2x4                            | 21 $\frac{5}{8}$ inches |
| Nails                |          | 3d, 6d, 8d, 10d, 16d           |                         |
| Deck screws          |          | 1/4, 2, 3 $\frac{1}{2}$ inches |                         |

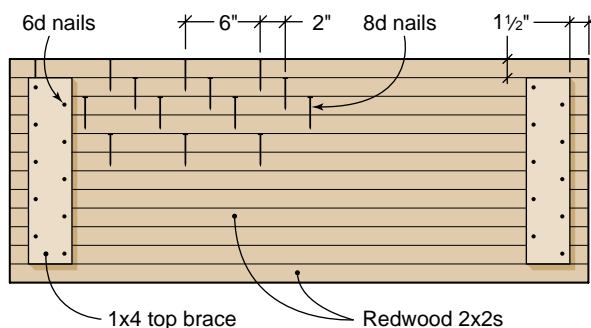
## PLANTER BENCH TOP

Paneled planters built to different lengths can be topped with a redwood butcherblock bench top of nail-laminated 2x2s to provide comfortable outdoor seating or convenient storage for hoses or gardening tools. Use the corner workframe to align and to assemble the butcherblock lumber.



**1. Butcherblock top** Nail-laminate twelve 2x2s, working into the square corner frame. To minimize grain-raise on the seating surface, install the 2x2 boards with the vertical grain exposed. Nail each 2x2 with 8d nails every 6 inches, spaced as shown below.

Trim butcherblock top ends to fit the planter's length and lightly sand all trimmed ends. Trim two 1x4s to 15 inches. Nail these across all 2x2s, 1 $\frac{1}{2}$  inches from each end and from each edge. Use one 6d nail at each 2x2 on alternating sides as shown. These braces will give the top a snug fit to the planter.



Contact the California Redwood Association for more great publications containing redwood technical and building information. Call us at 415 382-0662 for a complete literature list or to ask for any of the titles listed here:

### Other Construction Tipsheets

Deck Over Concrete  
8x10 Deck  
Butcherblock Bench  
4x4 Planter  
Mendocino Bench  
Sonoma Picnic Table  
Lake Tahoe Gazebo  
Windsor Shade Shelter  
Monterey Potting Center  
Calistoga Spa Surround

### Also Available

Deck Construction  
Deck Grades, Nails and Finishes  
Fences for All Reasons  
Exterior Finishes  
Landscape Architecture

## **Redwood**

For beauty and performance, redwood is naturally superior to other woods. That's why it's the first choice for decks, fences and most outdoor projects. Redwood retains its beauty outdoors, shrinks and swells less than other woods and is less likely to warp, split, check or cup. With little or no pitch, redwood is easy to drill, saw and shape. Redwood heartwood has natural durability and resistance to insects and will last longer outdoors than most woods.

## **Grades**

The knotty garden grades of redwood are ideal for outdoor projects. These grades are beautiful, durable and economical.

**Construction Heart/Deck Heart** is all heartwood and contains knots; used for load-bearing applications near the ground. Deck Heart is graded for strength and is available in 2x4 and 2x6.

**Construction Common/Deck Common** contains sapwood and knots; used for decking and above-ground uses. Deck Common is graded for strength and is available in 2x4 and 2x6.

**Merchantable Heart** is all heartwood and contains larger knots than Construction grades; used near the soil.

**Merchantable** contains sapwood and larger knots; used for fence boards, rails and above-ground uses.

## **Finishes**

Redwood accepts finishes better than most woods. Some heighten redwood's natural beauty, bringing out the color and the grain. Others help the wood harmonize or contrast with surrounding structures. Keep in mind that unfinished redwood will gradually turn soft driftwood gray. Read the labels on all finish products before using.

**Clear water repellent finish** with mildewcide is recommended to stabilize the color at tan.

**Bleaching and weathering stains** produce a permanent driftwood gray effect, a good, low-maintenance option.

**Semitransparent stains** in "redwood" shades tint the wood without hiding the grain.

**Solid-color stains or paints** should be applied over compatible oil-based primers.

## **Fasteners**

Use only non-corrosive hardware such as aluminum, stainless steel or top quality hot-dipped galvanized screws or nails. Ordinary nails and screws will cause stains.



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