



Women Building America



Girls' Construction Camp Project Instructions: *Planter Box*



BUILD



EMPOWER



INSPIRE

BUILDING CONFIDENCE.
BUILDING FUTURES.



➤ REAL TOOLS. REAL SKILLS. *Real Impact.* ➤



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Tools & Building Materials Needed to Complete this Project:

(1) 1x6x10 ft

(18+) 1 5/8" Deck Screws

(2) Handles (optional)

Paint / Stain

Table Saw

Miter Saw

Power Drill

Drill Bits & Drivers

Speed Square

Tape Measure

Pencil

Optional Materials:

Wood Glue

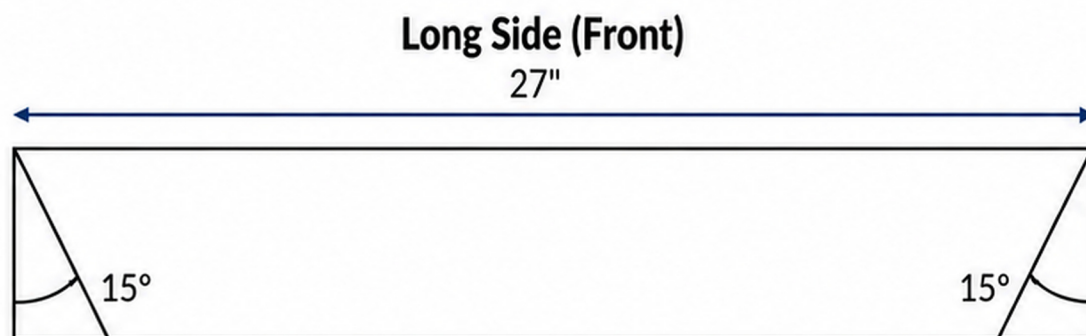
Sandpaper

Caulk / Wood Filler

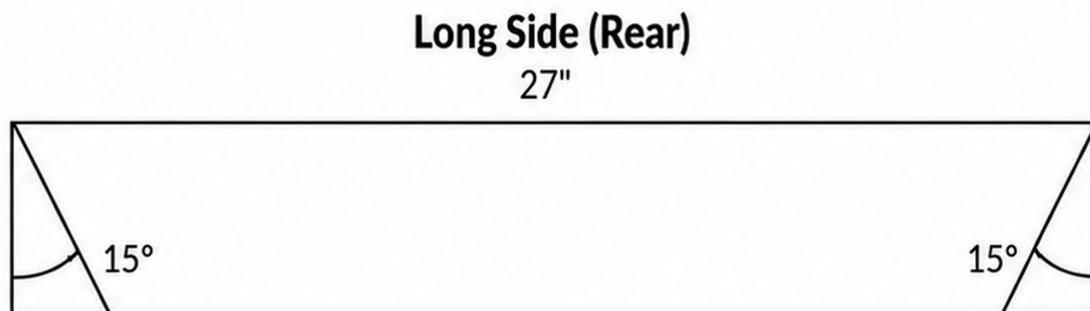




Trapezoid



Trapezoid



Step 1:

Cut the two long side pieces

1. Using a speed square, mark a 15-degree angle at the end of the board. Set the miter saw to a 15-degree angle.
2. Cut one end of the board at a 15-degree angle. Roll the board over so the long point is closest to you. Measure 27 inches from the cut edge and mark the board.
3. Use a speed square to mark a 15-degree angle in the opposite direction, creating a trapezoid shape.
4. Cut on the line. This will be the first long side piece.
5. To make the second long side piece, roll the board again so the long side is closest to you. Lay the first piece on top of the board, line up one end flush, and trace the opposite end. Cut on that line with the saw still set at 15 degrees.

*You should now have two matching trapezoid-shaped long side pieces.

Step 2: Cut the bottom piece

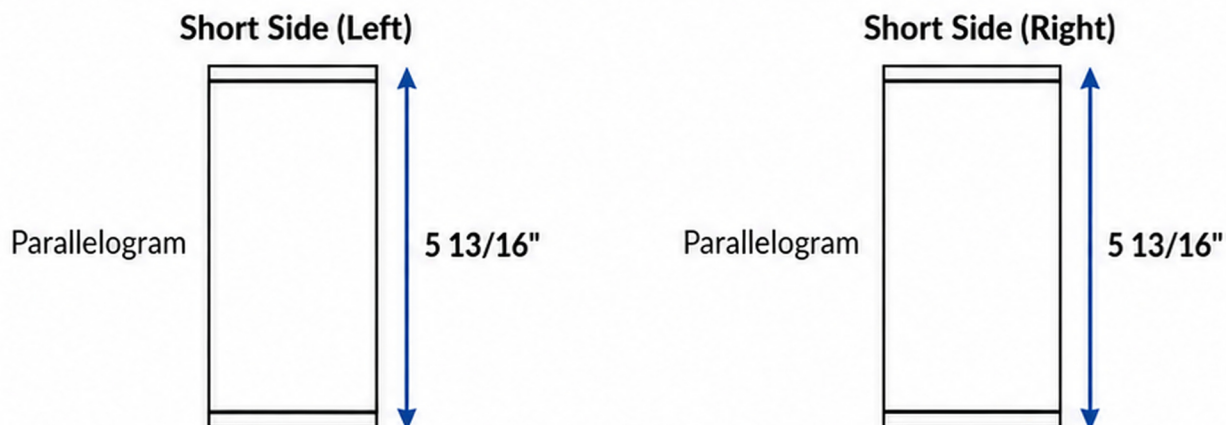


1. Set the saw to:
0-degree miter angle
15-degree bevel angle
2. Make a straight cut across the end of the board. This creates a 15-degree beveled edge.
3. Turn the board so the short side of the bevel is facing up. Measure 22 1/2 inches from short point to short point. Mark and cut the bottom piece.

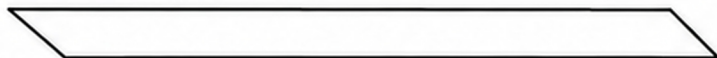
*You should now have one trapezoid-shaped bottom piece.

NOTE:

Symbol  Indicates the 1" thickness of this board is beveled 15°.
• 6° face remains square.



Side view after cuts have been made:

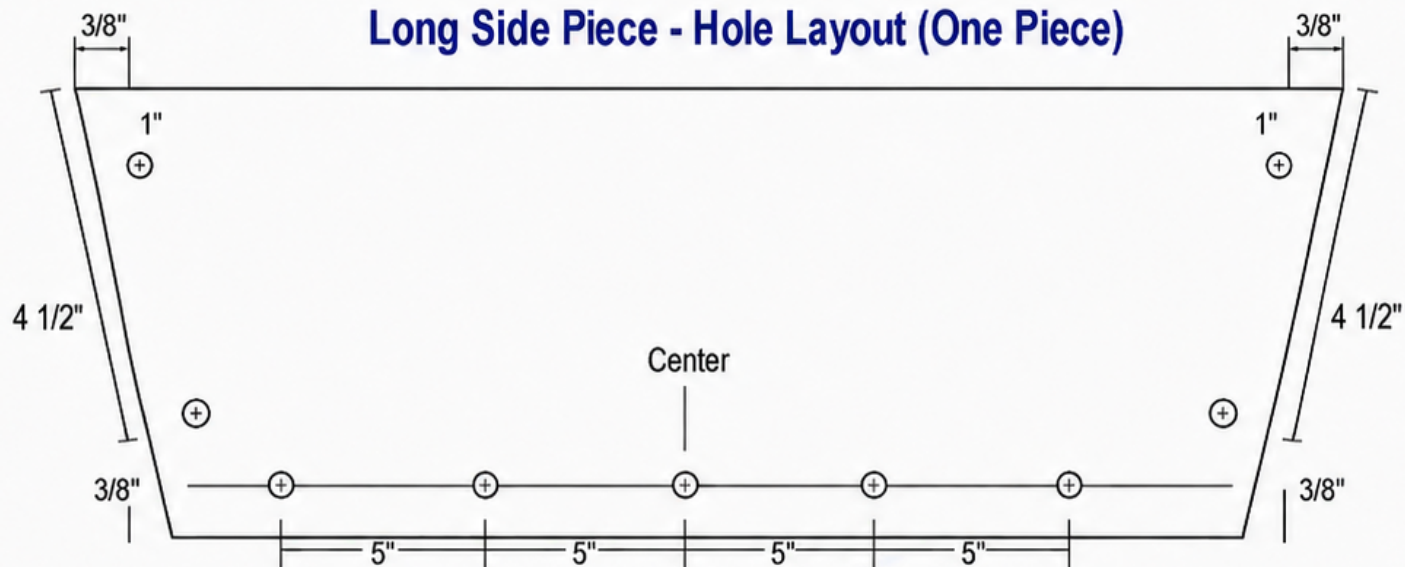
**Step 3:****Cut the two end pieces**

1. Keep the board positioned with the **long side** facing up. Measure **$5 \frac{13}{16}$ inches** from the point and mark the board.
2. Cut two matching end pieces.

*You should now have **two parallelogram-shaped end pieces**.

Step 4: Marking Screw Holes

Long Side Piece - Hole Layout (One Piece)



3/4

Guidelines center the screws in the side boards.

- 1.** Use a speed square to mark screw placement lines on the long side pieces. Place the speed square vertically against each short end of the board and trace the line. Then mark the bottom edge the same way. These lines should place the screws in the center of the 3/4-inch-thick boards.
- 2.** On each end line, mark screw holes at:
1 inch; 4 1/2 inches
- 3.** Along the bottom line, find the center. From the center mark, measure in 5-inch increments in both directions until you have five total screw marks along the bottom.
- 4.** Optional - For added stability, a screw can be added in the bottom middle of the two short side boards to create another connection point with the bottom board.

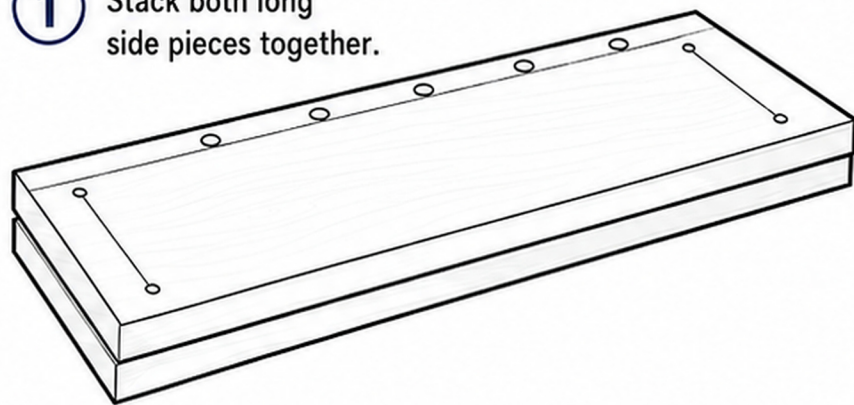


Step 5: Drill Screw Holes

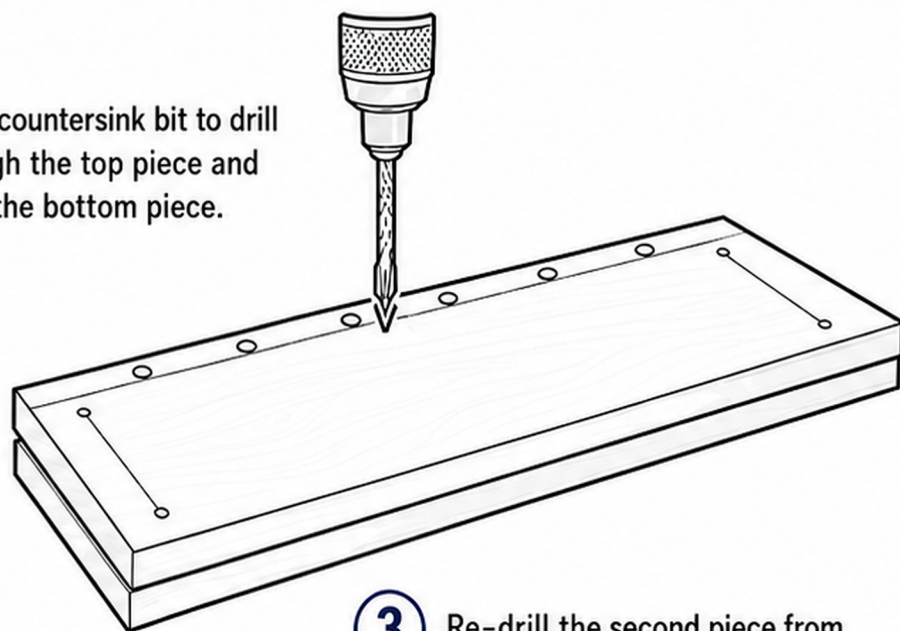
- 1 Stack the two long side pieces together. Using a countersink drill bit, drill through the top board into the bottom board so the holes line up on both pieces. Drill over the edge of the table so you do not drill into the work surface.

- 2 After drilling through both boards, re-drill the bottom board holes from the correct side so each screw hole has a countersink groove for the screw head.

- 1 Stack both long side pieces together.



- 2 Use a countersink bit to drill through the top piece and mark the bottom piece.

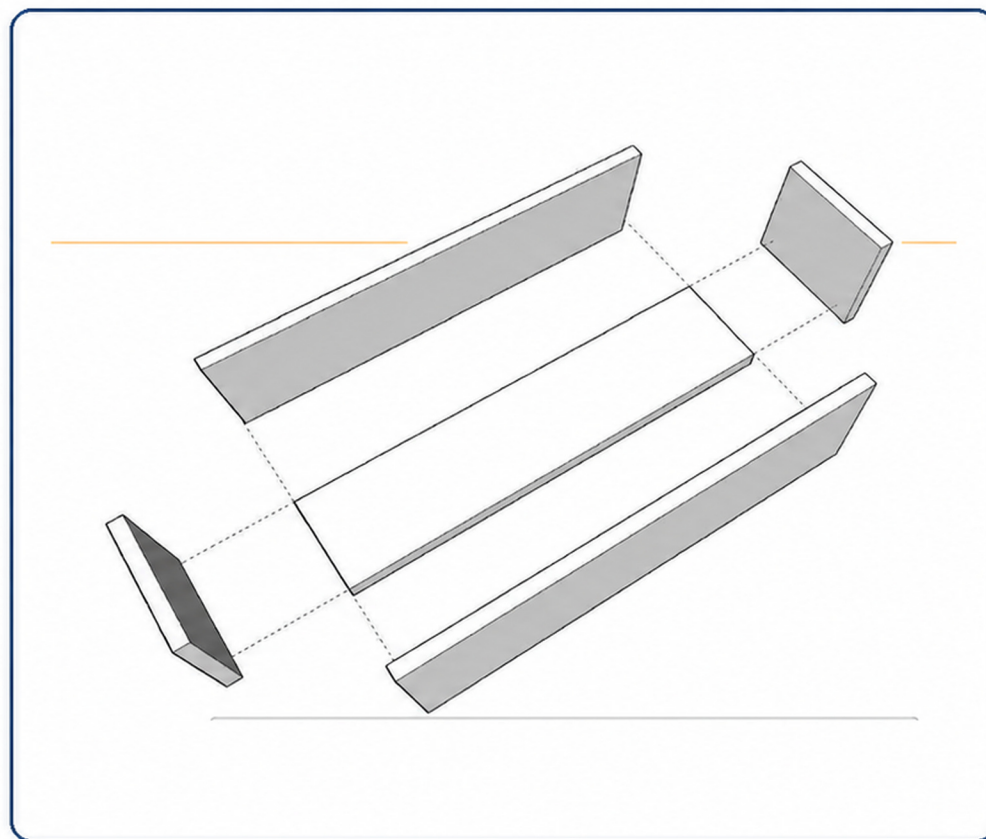


- 3 Re-drill the second piece from the correct side so both pieces have countersinks.

Step 6

Assembling the Planter Box

1. You may sand the pieces before assembly or after the box is put together.
2. Before you begin assembling your planter box, dry fit all of your pieces together to see if any cuts need to be adjusted. Once you are satisfied with the fit of all your pieces, collect 18 1 5/8" screws and a power drill with a drill bit and a driver bit.
3. To assemble, clamp the bottom piece vertically to help hold it in place. Use 1 5/8-inch deck screws. Set the drill to slow speed and medium torque.
4. Attach one end piece first so the bottom lines up correctly.
5. Then attach the bottom piece. Remove the clamp and attach the second end piece.
6. Once one long side is assembled, flip the project over and repeat the same process on the other side.

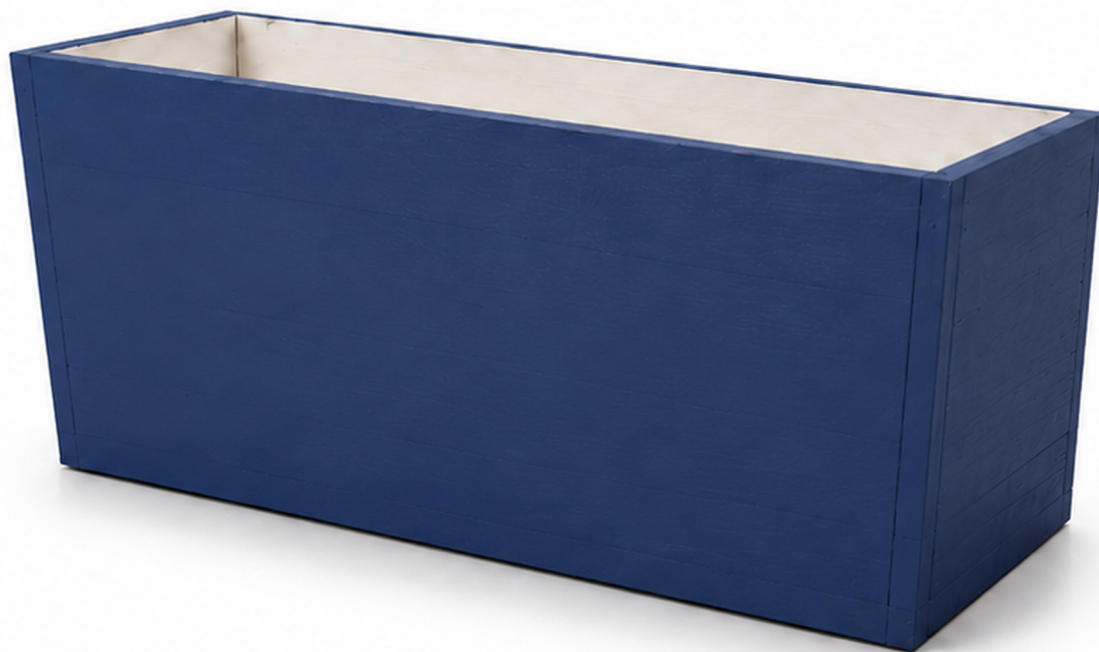




Step 7.

Great job! Your planter box is assembled and now it is time to apply one smooth base coat of paint. Keep the color even and cover the box completely.

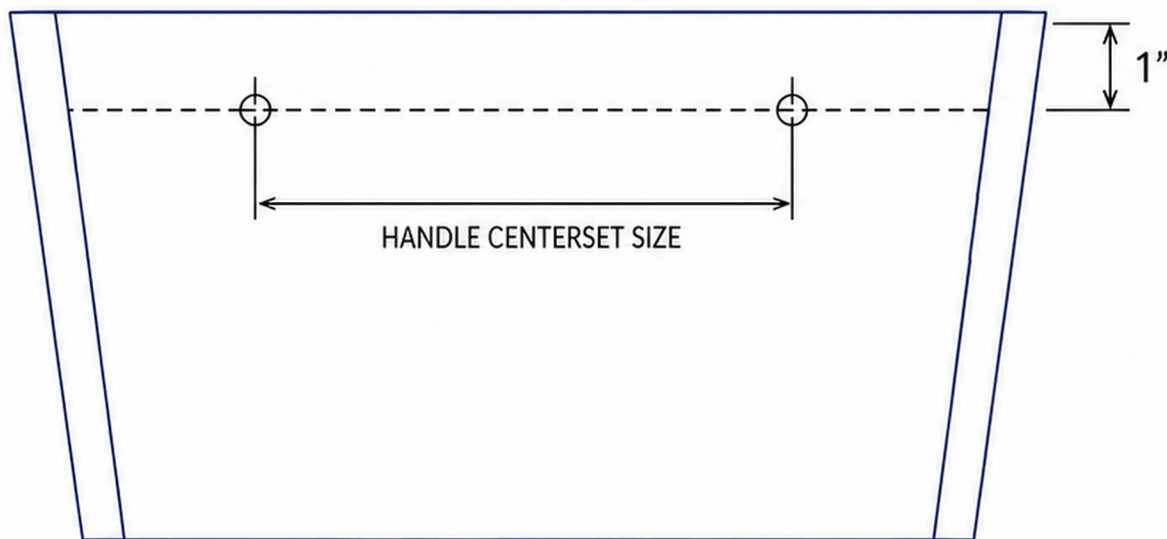
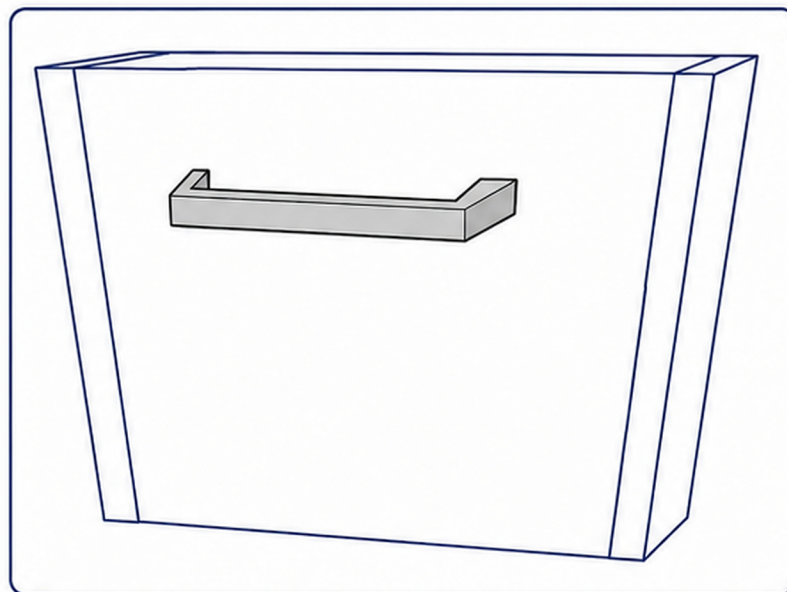
Decorative details, stencils, paint markers, and handles will come later.





Step 8. Once the paint is dry, you can add decorative handles to the short side of the planter box. Measure and mark 1" from the top of the planter box. Measure the distance between the screw holes on your desired handle. Mark the handle centerset size on the sides of your planter box and use a drill bit in a power drill to create screw holes. Mount your handles using a driver bit in a power drill.

TIP: To easily center your handle, mark a line 1" from the top across the sides of the planter box, then measure and mark the center of that line. Divide the handle centerset in half and use the measurement to mark an 'X' on either side of the centerline of the line you drew.





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STEP 9



Step 9.

Congratulations! You have successfully completed your planter box.

Now it is time to add the finishing touches with fine details like stencils and paint markers. Then fill your planter with soil, add your flowers or plants, and bring your project to life.

Take pride in what you built today. You used real tools, learned real skills, and created something beautiful, functional, and uniquely yours.



You built it. Now make it bloom.



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