

# HART™



Outdoor Bench  
@RootedinLove.Design

## PROJECT PLAN

**Skill Level:** Intermediate

# Materials

Item	Qty
Outdoor 2 ½" decking screws	
2" X 6" X 10' board*	1
2" X 6" X 6 board *	1
2" X 8" X 6' board*	1
120 grit sandpaper**	1
Tack cloth	1
Stain	1
Polyurethane (outdoor)	1

\* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

\*\* Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper.

Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

# Tools Used



Miter Saw



Brushless Drill



Brushless  
Impact Driver



Orbital Sander



Pencil



Tape Measure



Safety Glasses

**ALSO NEEDED:** carpenter square, clamps x4

Battery Tip: A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

# Assembly Instructions

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## Step 1

Make cuts to the leg board (2" X 6" X 10' board). Set the miter saw to 22 1/2° angle. Make the first cut at the end of board. Measure from the end up, and cut at 36 1/2" at the 22 1/2° angle.

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## Step 2

Repeat step 1.

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## Step 3

After cutting the 36 1/2" legs, measure up from the angled edge of the board to 17 3/4".

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## Step 4

Repeat Step #3. You should now have 2 cuts at 36 1/2" and 2 cuts at 17 3/4".

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## Step 5

Cut the seat board (2" x 8" x 6' board). Measure to 45", mark, and cut at 90° angle.

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## Step 6

Cut the back rest (2" x 6" x 6' board). Measure to 48", mark, and cut at 90° angle.

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## Step 7

Once wood glue is dry, paint entire crate and dowels desired base color.

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## Step 8

Stack the backrest cut and seat cut onto a steady surface, making sure long edges are flush with each other. Clamp the boards straight and flush to the steady surface. Place one of the 36 1/2" leg cuts down and the other 36 1/2" leg cut opposite, so that it comes to a point at the top. Place one of the 17 3/4" leg cuts on top of the 36 1/2" leg pushing the 22 1/2° angle flush with the two boards clamped together (backrest and seat cuts). Make sure the top edge of the short leg is flush with the edge of the long leg. Pre-drill 3/4" from the edge, four holes, equally spaced to prevent splitting or cracking. Place four decking screws in each pre-drilled hole using impact driver. Unclamp legs from steady surface and place on even floor surface to ensure legs are flush and steady.

## Step 9

Lay one leg with 17  $\frac{3}{4}$ " cuts facing towards ceiling. Lay the second set of legs 48" away from first set, also facing towards ceiling. Place the backrest on top of 36  $\frac{1}{2}$ " leg, making edges flush. Pre-drill, and assemble three holes,  $\frac{3}{4}$ " from the top and equally spaced.

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## Step 10

To install the seat, make the back edge of seat flush with the edge of the 17  $\frac{3}{4}$ " board. Pre-drill two holes, equally spaced, on the outer edge of the seat, securing it to the legs.

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## Step 11

Sand the assembled bench smooth with orbital sander, using 120 grit sandpaper.

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## Step 12

Wipe down the bench with tack cloth before staining the bench with your choice of color and let dry.

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## Step 13

Polyurethane (with outdoor rating) and let dry.

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## Step 14

Enjoy the your new outdoor bench!