

HART™



Porch Swing

PROJECT PLAN

Finished Dimensions: 22' 3/4"W x 5' 1/2"H

Skill Level: Beginner

Materials

Item	Qty
2" x 4" x 8' Board*	4
1" x 4" x 6' Board*	1
1" x 6" x 6' Board*	6
Wood Glue	1 gallon
Wood Filler	
Sandpaper: 80g, 120g, 220g**	
#10 - 2-1/2" Flathead Exterior Wood Screws	1 box
5/16" Drill Bit	1
3/8" x 4" Eye Hood with Nut	4
1-1/4" 16-Gauge Brad Nails -OR- #10 1-1/2" Exterior Wood Screws	1 box

* 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

OR



Circular Saw



Drill/Driver



Impact Driver



Orbital Sander



2.0Ah Battery



Charger



Tape Measure



Safety Glasses



Countersink Bit Set



Hammer



Titanium Bit Set



Level



Carpenter's Pencil

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

Lumber Cut List

Board*	Description	Cut to	Qty
2" x 4"	Seat Frame - Front & Back	60"	2
2" x 4"	Seat Frame - Middle Braces	19-3/4"	4
2" x 4"	Swing Back Supports	23-1/4"	4
2" x 4"	Arm - Rest	24-1/4"	2
2" x 4"	Arm - Front	11-1/4"	2
1" x 4"	Back Rest - Top	60"	1
1" x 6"	Back Rest - Middle & Bottom	60"	2
1" x 6"	Seat Bottom	60"	6

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

Lumber & Sheet Layout Guide

60"			19-3/4"	11-1/4"	EXTRA
60"			19-3/4"	11-1/4"	EXTRA
23-1/4"	23-1/4"	23-1/4"	23-1/4"	EXTRA	
24-1/2"	24-1/2"	19-3/4"	19-3/4"	EXTRA	

Assembly Instructions

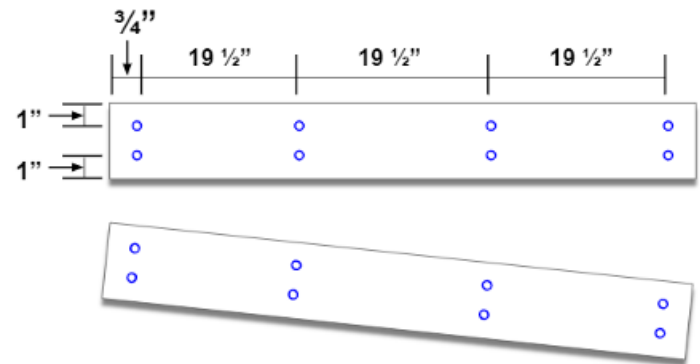
Step 1

Cut all boards using the Lumber & Cut Sheet Layout Guide using a miter saw or circular saw.

Step 2

Take the (2) 60" 2" x 4" seat frame pieces and mark where the countersink holes go on both boards. All holes should be marked 1" from the edge. The first mark should be 3/4" from the side and the remaining are 19-1/2" apart.

Follow the same measurements to mark the top and bottom of each board.

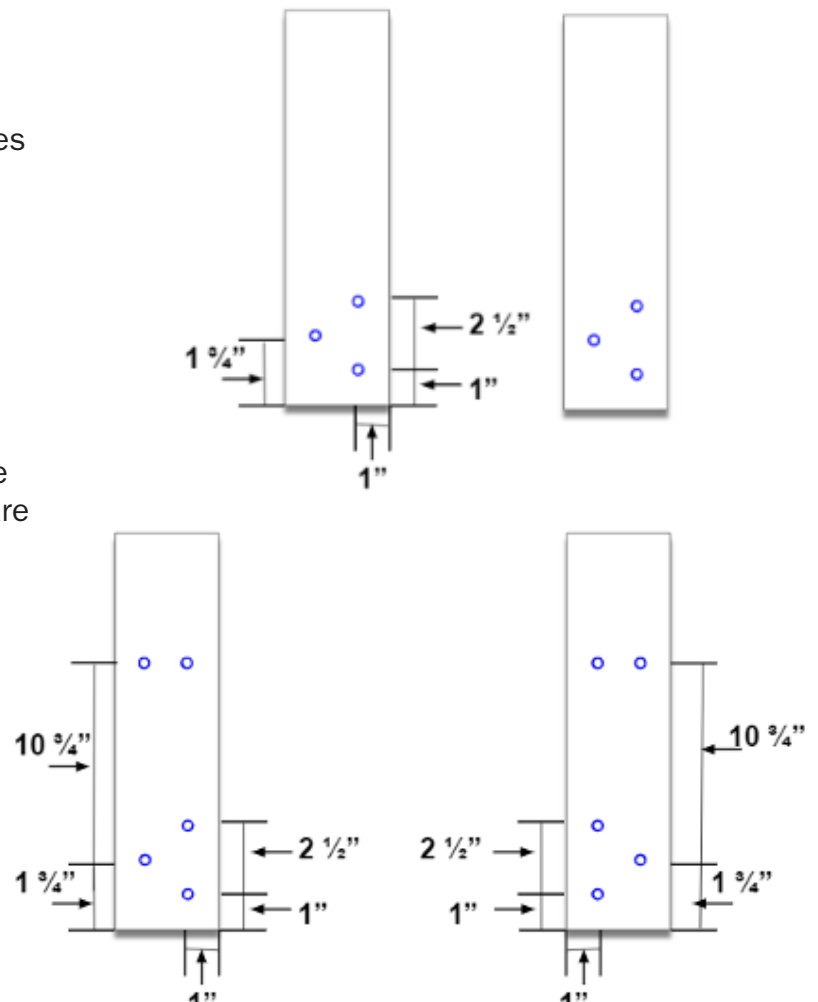


Step 3

Take the (2) 23-1/2" back support pieces and mark for the countersink holes. These two pieces will be the middle back supports. All marks will be placed 1" from the edge.

Take the (2) remaining 23-1/4" back support piece and place your marks according to the diagram below.

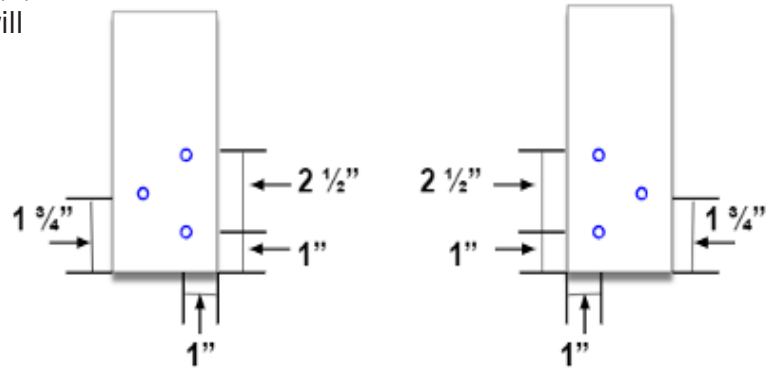
Notice the right back support hole placement is flipped. This will allow you to avoid hitting the seat frame screws during assembly. All marks are placed 1" from the edge.



Step 4

Take your (2) 11-1/4" arm front pieces mark where your countersink holes will go.

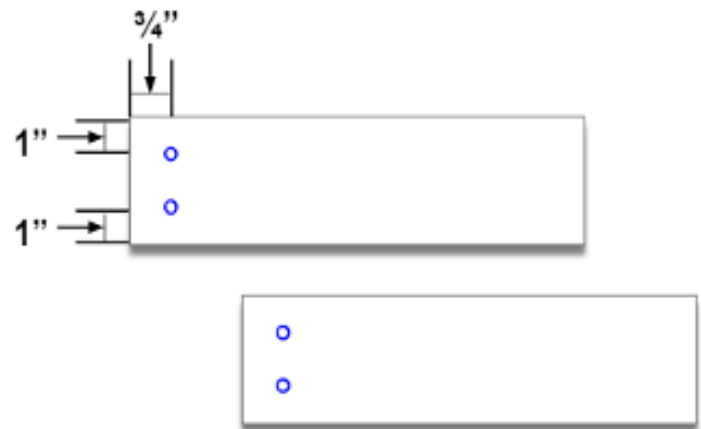
(1) piece will have the two holes on the left and (1) piece will have the two holes on the right. This will allow you to avoid hitting the seat frame screws during assembly.



Step 5

Take the (2) 24-1/4" armrest pieces and mark where the countersink holes will go.

The marks will be placed 1" from the edge on both sides at 3/4".



Step 6

Using the countersink bit to drill the holes on all marked boards. Drill 3/16" deep on all locations.

All holes will be covered or filled at a later step.

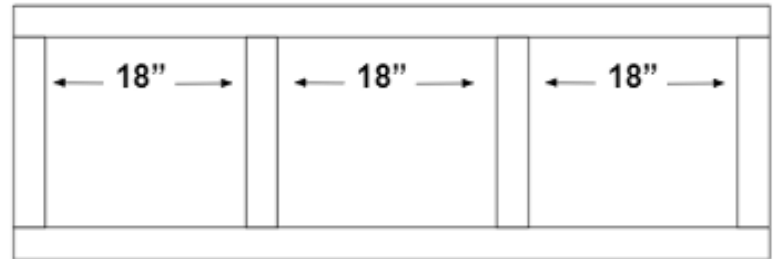
Step 7

Lay out your seat frame pieces on a level surface.

Place the (2) 60" pieces parallel to one another with the countersink holes facing out. Place the (4) 19-3/4" middle braces on the inside of the 60" pieces.

Align the two outer braces with the ends of the parallel boards to form a rectangle.

Place the (2) middle boards inside the frame leaving 18" between each board.



Apply wood glue to the end of each middle brace and attach the outer boards using #10- 2-1/2" exterior wood screws. All attachments using 2" x 4" pieces will be made with these screws and wood glue.

 **Tip - If assembling by yourself, use a clamp to hold the boards in place while attaching.**

Step 8

Before attaching any other pieces, sand down the outside perimeter and top of the seat frame.

Also sand all remaining 2" x 4" pieces as well as the 1" x 4" board and the 1" x 6" board.

 **Suggested order for sanding 2"x 4" pieces: 80g, 120g, 220g**

Suggested order for sanding 1"x4" and 1"x 6" pieces: 120g, 220g

Step 9

Turn the seat frame on its side with the back of the frame facing up. Align and attach the (2) outer back supports using wood glue, then screws, ensuring the left support and right supports are on the correct end to avoid hitting the seat frame screws when attaching.



Measure in 15" from each side and attach the middle supports.

Step 10

Place the swing back in an upright position.

Lay out and align the 1" x 6" pieces over the seat frame. Leave a 1/4" gap between each board.

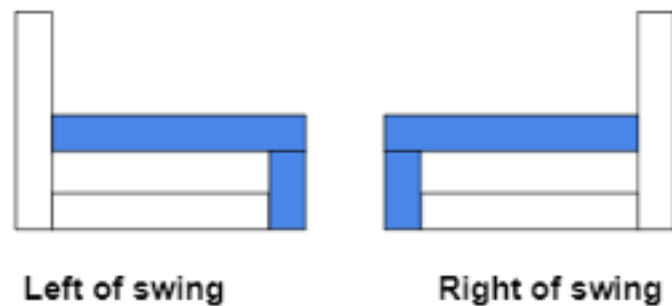
Nail the boards into the seat frame using 1-1/4" brad nails, placing two nails into each brace.

H Tip: If you don't have a nail gun, you can drill countersink holes 3/16" deep and attach the boards with the #10-1-1/2" exterior wood screws instead of nails.

Step 11

Align and attach the front of the armrests, ensuring each piece is on the current side based on screw placement.

Align and attach the armrest tops to the armrest fronts. Use a level to ensure the armrest top is level and attach it from the back of the swing.



Step 12

Lay the swing on its back. Align the 1" x 4" piece with the top of the backrest and nail in place.

Place (1) 1" x 6" board on the top of the arm rests. Align and check for even spacing from the top trim. Nail in place.

Place the remaining 1" x 6" board directly underneath the arm rest. Align and check for equal spacing from the seat frame. Nail in place.

Step 13

Fill all nail holes and countersink holes with wood filler and let dry thoroughly.

The countersink holes may need a second coat of wood filler.

Once dry, sand the areas where you placed the wood filler.

Step 14

Now you are ready to paint or stain the swing the color of your choice!

Step 15

After painting or staining is completely dry, measure and mark where your eye bolts will be placed.

Measure 1" in and 1-3/4" up on both sides of the middle brace of the seat frame. Drill (4) pilot holes for the eyebolts with a 5/16" drill bit, then screw in each eye bolt and secure each bolt with a 3/8" nut.

Your porch swing is complete! Now all that is left to do is hang your swing by the method of your choosing!

