



Entryway Bench

PROJECT PLAN



Materials

Item	Qty	
3/4" x 4' x 8' Birch Plywood	1	
1" x 12"x 36" Poplar Board*	1	
1" x 10"x 36" Poplar Board*	1	
1" x 6"x 8' Board*	2	
1" x 3"x 8' Board*	1	
1" x 2"x 8' Board*	6	
2-1/2" x 10" x 7" Wood Corbels	2	
4" x 4" Square Furniture Feet	4	
Coat Hooks	3	
1-1/4"x 18-Gauge Collated Brad Nails	1 Box	
1-1/2"x 18-Gauge Collated Brad Nails	1 Box	
Sandpaper* *: 150g, 220g & 320g		
Drill Bits: 3/8"		
Wood Glue		

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

- 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



Also Needed: Safety Glasses, Clamps, Hex Key Set, Framing Square and Rafter Square

SYOBI

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

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



Lumber Cut List

Board*	Description	Cut to	Qty	45° Cut †
1" x 12"	Backer Board	32"	1	
1" x 10"	Top Shelf	33-1/2"	1	
1" x 6"	Side Boards	75"	2	
1" x 6"	Feet Pads	5-1/2""	4	
1" x 3"	Seat Back Lower Rail	32"	1	
1" x 3"	Inner Base Face Trim	33-1/2"	1	\wedge
1" x 3"	Inner Base Side Trim (R&L)	11-7/8"	2	/
1" x 2"	Top Back Trim	32"	1	
1" x 2"	Top Outside Trim (R&L)	6-1/4"	2	/
1" x 2"	Top Inside Trim (R&L)	4-3/4"	2	/
1" x 2"	Top Face Trim (R&L)	2-1/4"	2	\wedge
1" x 2"	Upper Back Stiles	4-1/2"	3	
1" x 2"	Shelf Face Trim	35"	1	\wedge
1" x 2"	Shelf Side Trim (R&L)	10-3/4"	2	/
1" x 2"	Back Stiles	39-1/4"	3	
1" x 2"	Seat Back Under Support	14-3/8"	2	
1" x 2"	Seat Face Trim	35"	1	\wedge
1" x 2"	Seat Side Trim (R&L)	17-3/8"	2	/
1" x 2"	Seat Side Stiles (R&L)	12-3/4"	2	
1" x 2"	Seat Face Stiles	11-1/4"	3	
1" x 2"	Outer Base Face Trim	35"	1	\wedge
1" x 2"	Outer Base Side Trim (R&L)	18-1/8"	2	/

[†] The (/) symbol represents a single 45° cut on one end of the piece, (/\) represents both ends of the board are cut at 45° . All Cut to dimensions are to the long side dimension of a cut board.

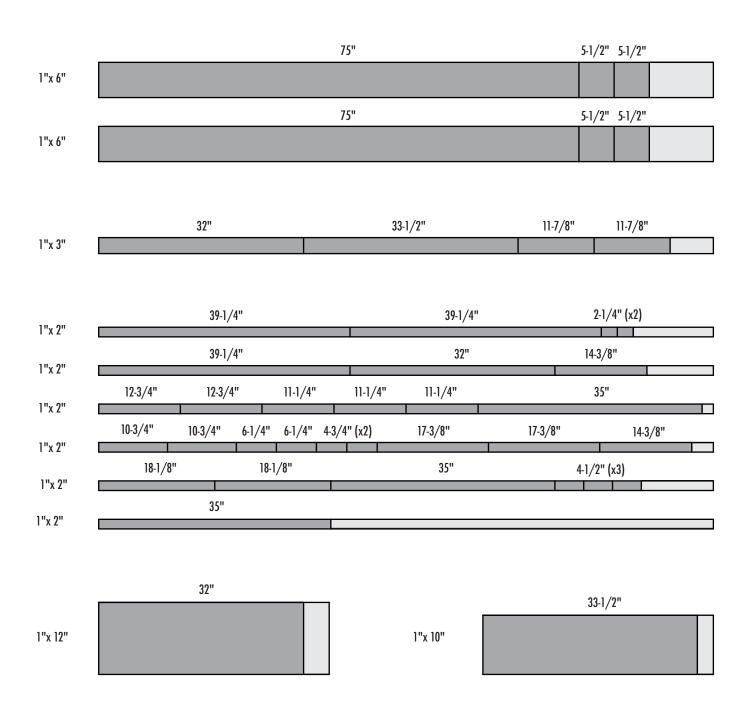


Tip - Your dimensions on the trim boards may vary from the list above. For this reason, you should use these dimensions as a guide, but take measurements from your own build to get accurate dimensions before cutting.

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



Lumber Layout Guide



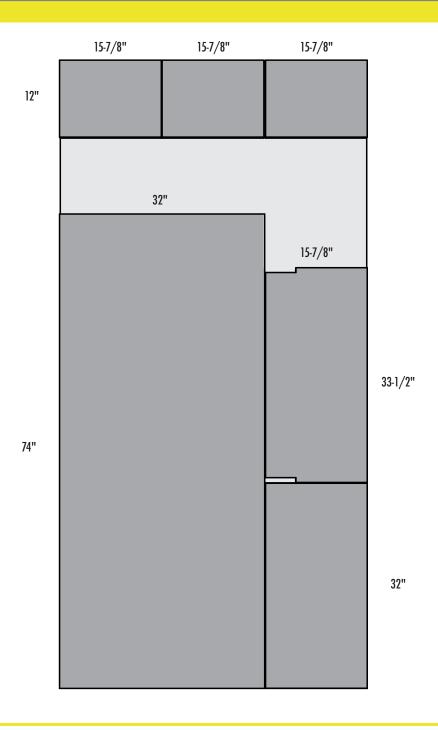


Sheet Cut List

Board * Description	Cut to	Qty
1" x 32" Back Panel	74"	1
1" x 15-7/8" Bench Base Panel	32"	1
1" x 15-7/8" Bench Seat	33-1/2"	1
1" x 12" Bench Partitions	15-7/8"	3

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

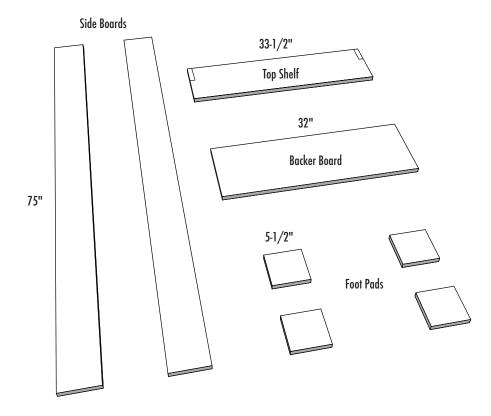
Sheet Layout Guide



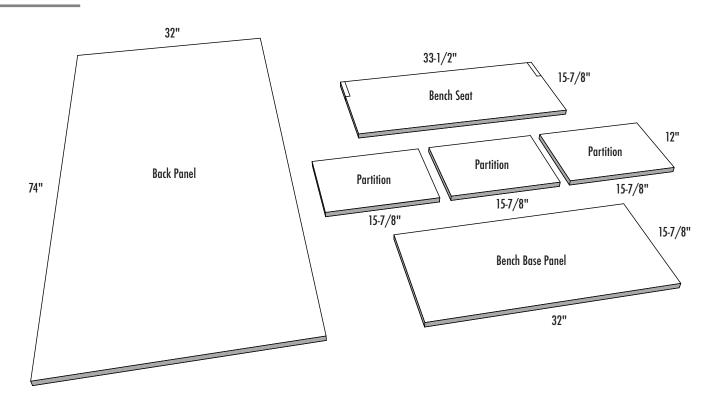


Lumber & Sheet Cut Layout Guide

Boards



Sheet





Assembly Instructions



Cut out all materials using the Lumber & Sheet Cut Layout Guide. This project will require plywood, $1" \times 12"$, $1" \times 10"$ and $1" \times 6"$ boards. Trim pieces will be cut from $1" \times 3"$ and $1" \times 2"$ boards.

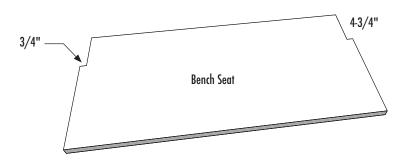
Step 2





On the back end of the bench seat panel, measure a 3/4" x 4-3/4" notch on both top corners.

Cut out the corners using a Circular Saw and a Jig Saw.

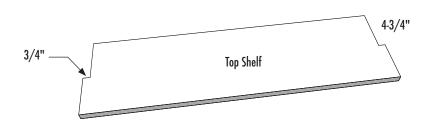


Step 3





Repeat Step 2 on the top shelf piece. Remove a 3/4" x 4-3/4" piece from each top corner using a Circular Saw and Jig Saw.

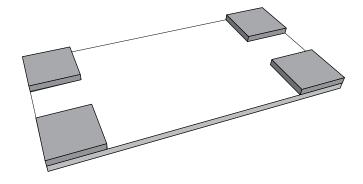








Attach a 5-1/2" foot pad to each corner of the underside of the base bottom. Attach them using glue and 1-1/4" brad nails.



Step 5



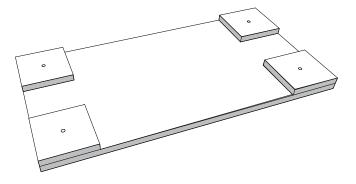


Find the center of each foot pad and drill a 3/8" hole that is 1" deep.



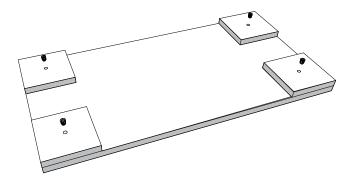
Tip - Wrap masking tape to set the depth of the hole. When the tape meets the wood, stop drilling.





Step 6

Install the screws that came with the furniture feet into the 3/8" holes using a hex key.



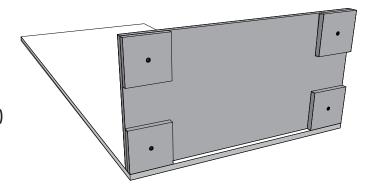




Align the foot pads with the bottom edge of the back panel.

Glue and attach them from the back with 1-1/2" brad nails.

(All panels and boards should be glued before nailing.)



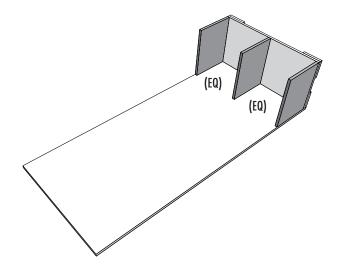
Step 8





Find the center for the middle bench partitions and attach all (3) partitions equal distance (EQ) from each other.

Nail in place using 1-1/2" brad nails.



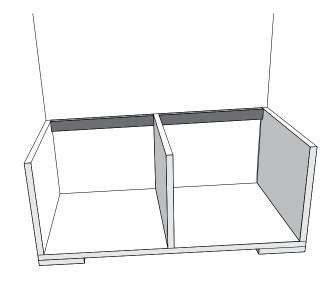
Step 9







Cut the under-support boards and attach them to the back panel with 1-1/4" brad nails. Make the top edge even with the top of the partitions.





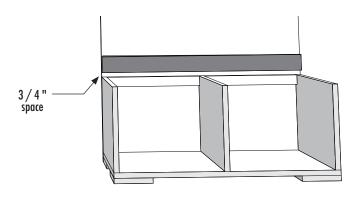






Measure 3/4" up from the under-support boards to allow the seat to slide in.

Cut and attach with 1-1/4" brad nails.

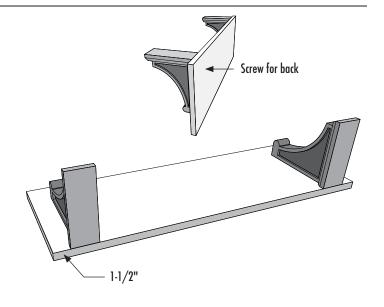


Step 11



Measure and mark a line 1-1/2" from each edge of the backer board. Align the corbels to the line and the upper edge.

Screw the corbels to the backer board from the back side.



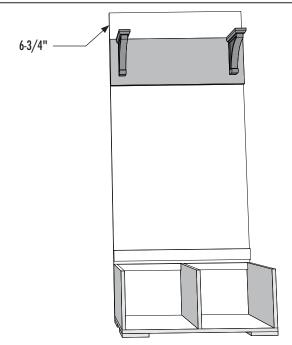
Step 12





Measure 6-3/4" downward from the top of the back panel.

Align the top of the backer board with the corbels and attach with the 1-1/4'' brads nails.

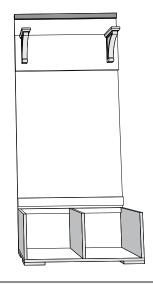








Cut and align the top back trim board to the top of the back panel using 1-1/4" brad nails.



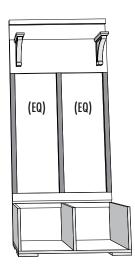
Step 14







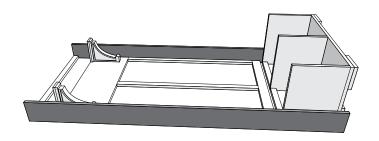
Measure and cut the back stiles. Place the stiles equal distance from each other and attach them to the back panel with 1-1/4" brad nails.



Step 15



Align the (2) $1" \times 6"$ boards with the top of the back panel and attach them from the sides with 1-1/2" brads. The side boards should extend 1" past the foot pads on the bottom.

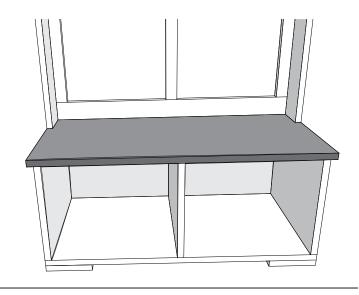








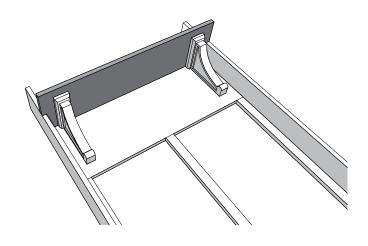
Attach the bench seat to the partition with 1-1/2" brad nails.



Step 17



Attach the top shelf to the corbels and backer board with 1-1/2'' brad nails.



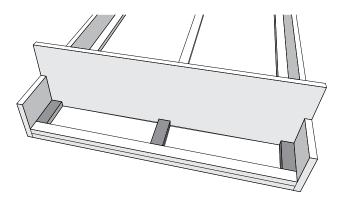
Step 18







Align the upper stiles to each edge and place (1) in the center. Attach with 1-1/4" brad nails.





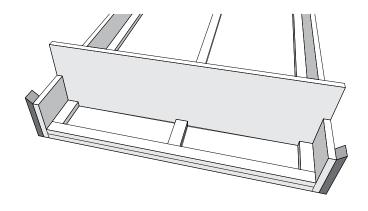






Align the top outside trim to the top edge of the side boards. Cut the edge at 45° to match the front edge of the face of the sideboard.

Attach with 1-1/4" brad nails.



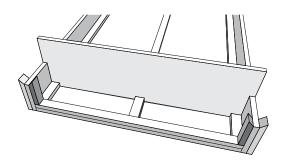
Step 20







Repeat Step 19 to attach the inner trim.



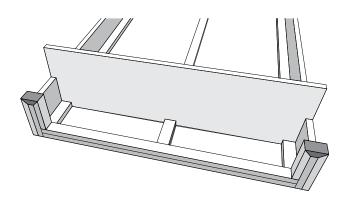
Step 21







Attach the top face trim board.





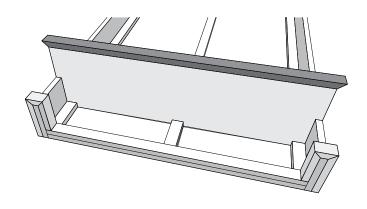






Align the top edge of the shelf face trim to the top surface of the shelf.

Attach with 1-1/2" brad nails.



Step 23

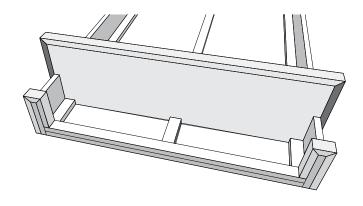






Align shelf side trim boards to 45° cuts.

Attach with 1-1/2" brad nails.



Step 24

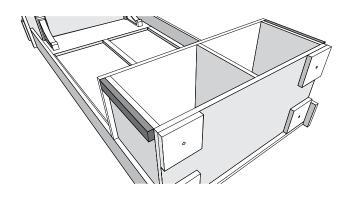






Add the seat side trim to both sides of the bench. Make sure it is even with the front edge of the partition.

Attach with 1-1/4" brad nails.

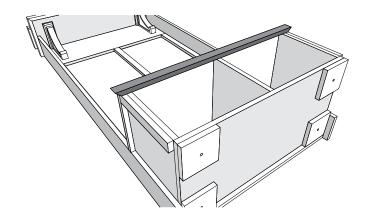






Align the seat face trim to the seat panel. Make it flush to the top of both boards. Make a 45° cut to match the outside edge of the side stiles.

Attach with 1-1/2" brad nails.



Step 26

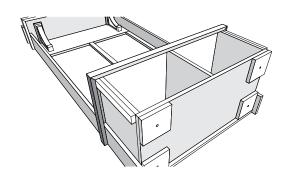






Align seat side trim boards to 45° cuts and with the top edge of the seat panel.

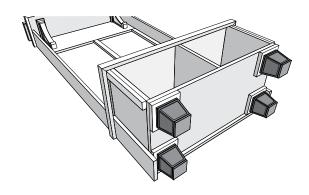
Attach with 1-1/2" brads.



Step 27

Attach all (4) feet to the pads by screwing them into the inserts.

The inserts may need to be rotated in order to run parallel with the bench.





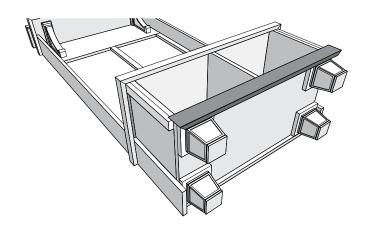






Align the inner base face trim to the seat base panel. Make it flush to the top of both boards. Make 45° cuts on each end to match the outside edge of the foot pads.

Attach with 1-1/2" brads.



Step 29

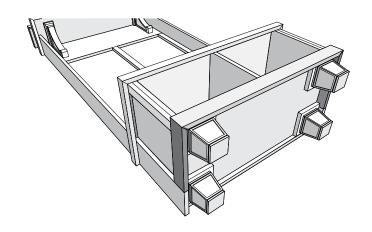






Align the base side trim boards to the 45° edges.

Attach with 1-1/2" brad nails.



Step 30

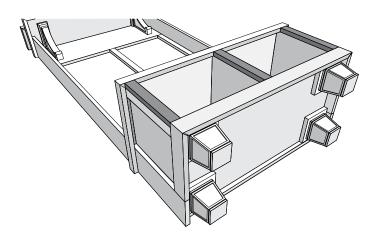






Attach all (3) seat face stiles to the partition panels. The outside edges of the stiles should be flush with the side stiles.

Attach with 1-1/2" brad nails.





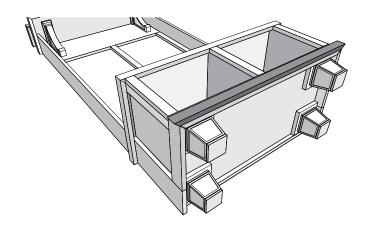






Align the outer base face trim to the bottom edge of the inner base trim. Make 45° cuts to match edges of the inner trim boards.

Attach with 1-1/2" brad nails.



Step 32

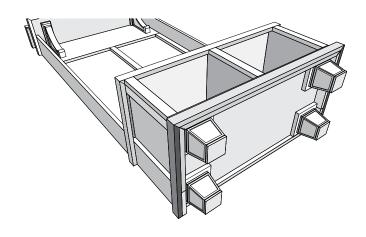






Align the outer base side trim boards to 45° cuts and along the bottom edge of the inner base.

Attach with 1-1/2" brad nails.



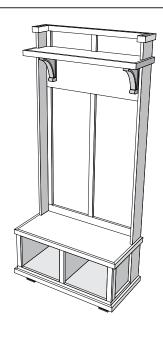
Step 33





Fill all nail holes and sand to your desired finish.

Follow sanding tips on Page 18.

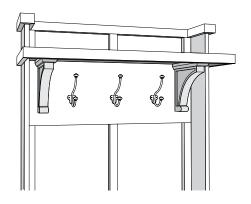






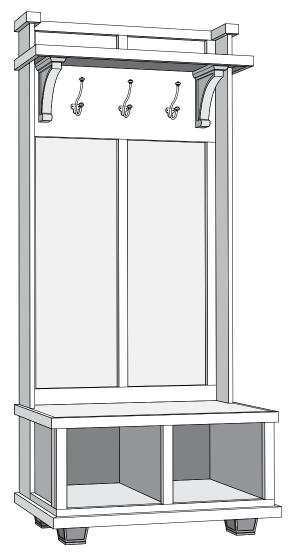


Install coat hooks to the backer board.



Step 35

Project complete!



Raugher finish – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

> **Smoother finish** – Use 60-80 grit sandpaper to remove scratches & imperfections.

Followed by using 120-220 grit to smooth.

Finish Sanding - Use 320-400 grit sandpaper

Super fine sanding – Use 600+ grit sandpaper