



Breakfast Tray

PROJECT PLANS



Materials

| Item | Qty | |
|--|-------|--|
| 21/32"x 18"x 48" Edge Glued Laminated Specialty Panel* | 1 | |
| 1-1/4"x 18-Gauge Collated Nails | 1 box | |
| 1/4"-20 x 40mm Connecting Bolts | 4 | |
| 1/4"-20 Lock Nuts | 4 | |
| 1/4" Flat Washers | 8 | |
| Drill Bits: 1/4" | | |
| Hole Saw: 1" | | |
| Wood Glue | | |
| Sandpaper**: 150g, 220g & 320g | | |

^{*} 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



7-1/4" Sliding Compound Miter Saw



Circular Saw



Jig Saw



Drill/Driver



18GA Brad Nailer



5" Random Orbit Sander



Rotary Tool



Tape Measure



Drill Bits



1" Spade Bit



5" Orbit Sandpaper

Also Needed: Safety Glasses, Speed Square, Hex Key Set, 7/16 wrench and Clamps

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

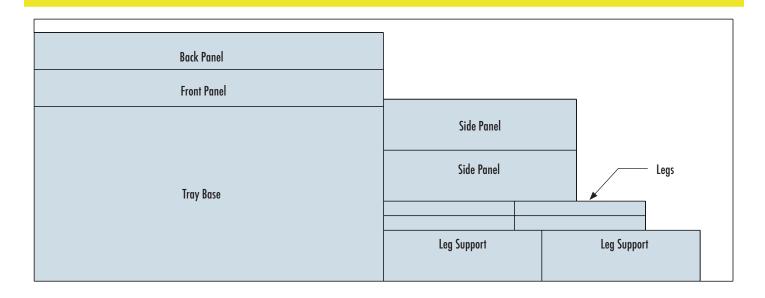


Lumber Cut List

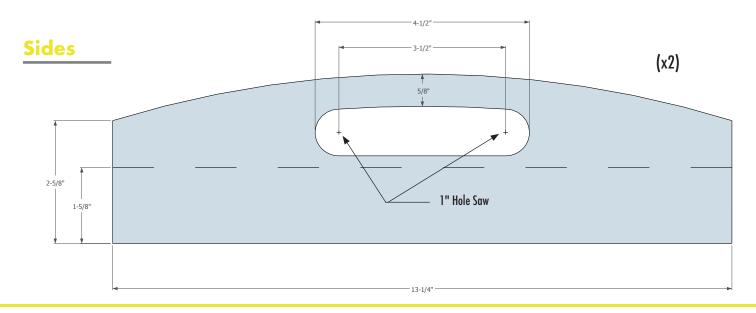
| Board* | Description | Thickness | Qty |
|------------------|--------------|-----------|-----|
| 12" x 24" | Tray Base | 21/32" | 1 |
| 2-5/8" x 24" | Back Panel | 21/32" | 1 |
| 2-5/8" x 24" | Front Panel | 21/32" | 1 |
| 3-5/8" x 13-1/4" | Side Panel | 21/32" | 2 |
| 1" x 9" | Leg | 21/32" | 4 |
| 3-1/2" x 10-5/8" | Leg Supports | 21/32" | 2 |

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

Lumber & Sheet Layout Guide



Panel Cut Layout Guide

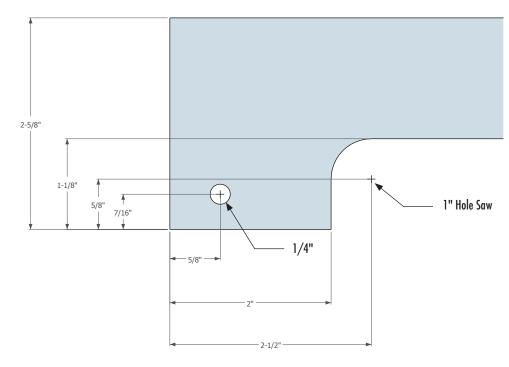




Panel Cut Layout Guide

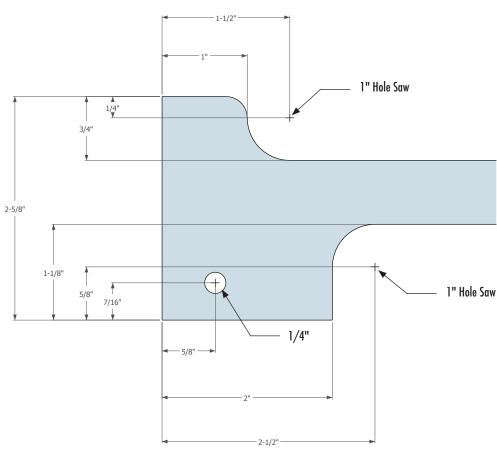
Back

(Left End Shown)



Front

(Left End Shown)





Assembly Instructions

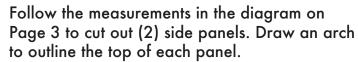


Cut out all material using the Lumber & Sheet Cut Layout Guide.

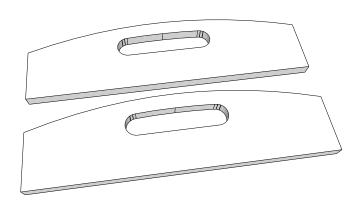
Some initial sanding can be done after cutting the boards and panels. Sanding pieces prior to building can make the process easier before final assembly. Refer to last page for sanding information.

Step 2





Use a 1" spade bit to cut a hole for the hand opening. Then use a jig saw to complete the hand opening.



Step 3

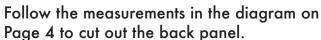






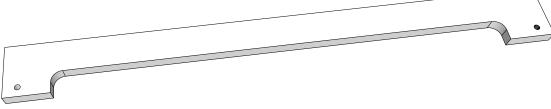






Use a 1" spade bit to cut the curve in the handle on each end. Use a jig saw to finish cutting the handle.

Drill 1/4" holes on each end as shown in the diagram to the right.





Step 4









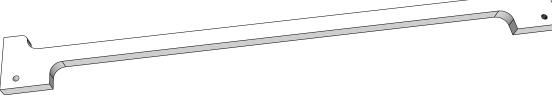


Follow the measurements in the diagram on Page 4 to cut out the front panel.

Use a 1" spade bit to cut the curve in the handle on each end. Use a jig saw to finish cutting the handle.

Next, use the rotary tool to smooth the top inside edge.

Drill 1/4" holes on each end as shown in the diagram.

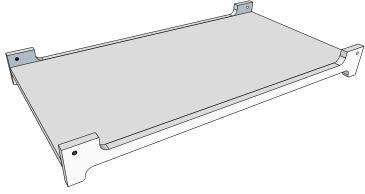


Step 5



Align the front and back panels to the tray base.

Glue and nail together with brad nails.

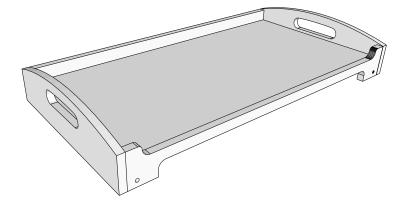


Step 6



Align the side panels to the tray.

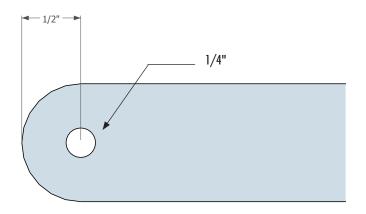
Glue and nail together with brad nails.





Step 7

Refer to the diagram below for the measurements on the legs.





Step 8









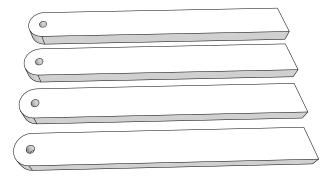




Cut out all (4) legs.

Trim one end to a half circle and drill a 1/4" hole at the center.

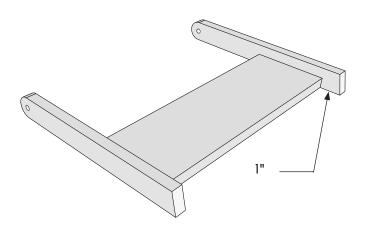
On the opposite end, cut a 15° angle or measure 1/4" and cut.



Step 9



Measure 1" from the long end of the angle cut on each leg. Mark a line. Align the support to this line.

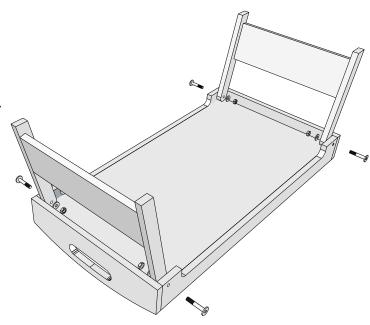




Step 10

Attach the legs to the tray using connecting bolts.

Leave a small gap between the nut and washer so the legs can swing freely.



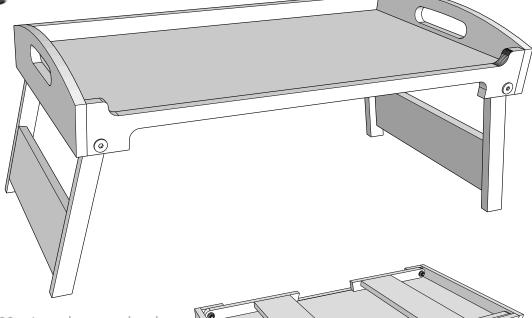
Bottom side legs folded up

Step 11



Sand and finish to your desire.

Project complete!



Rougher 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