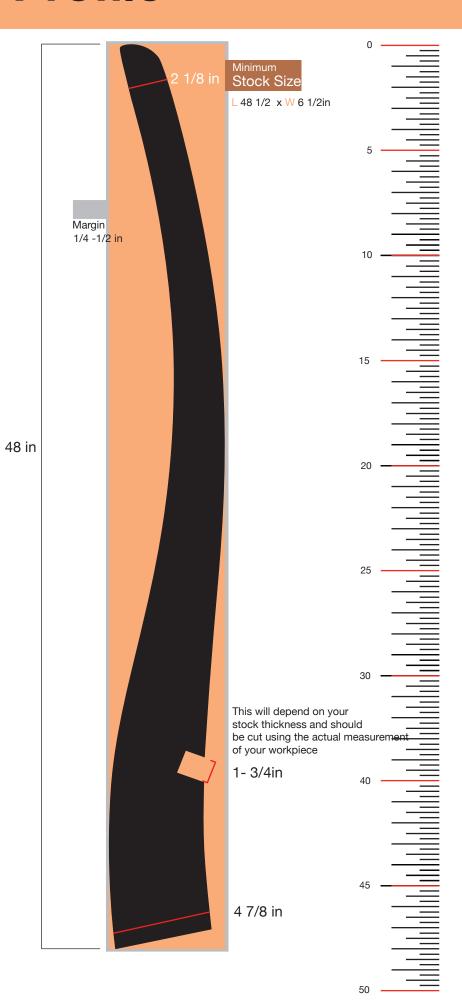


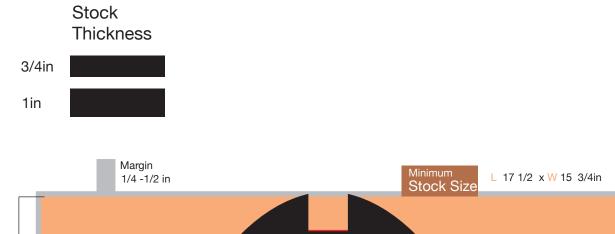
Neck Profile

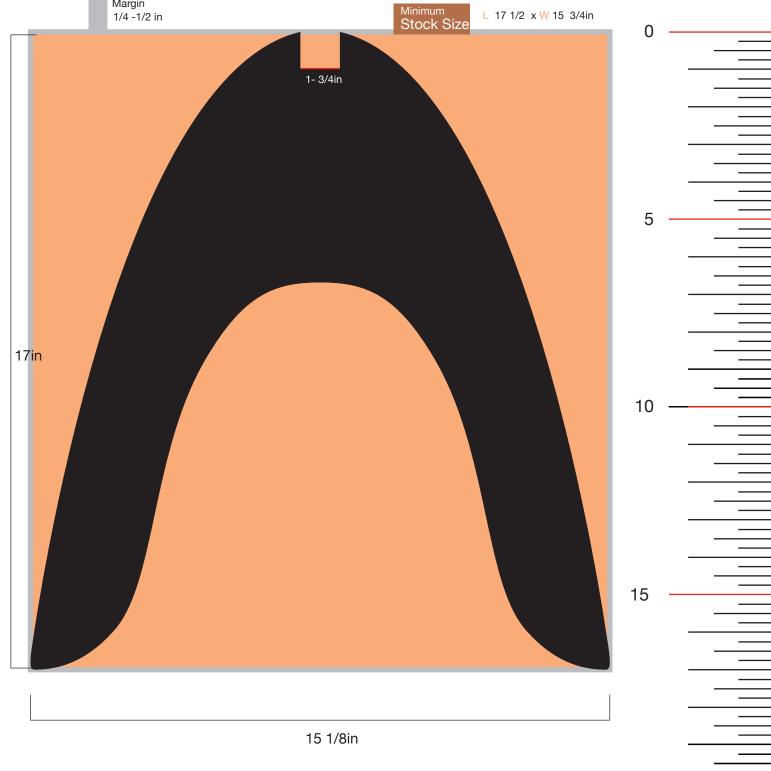






Base Profile





Tools and Materials

Ideal Tools

Table saw

Bandsaw or Jigsaw

Router

Miter saw

Hand plane

Orbital sander

Card scraper

Up cut carbide router bit with 1 1/4 in cutter

3/4in round over bit

Minimum Tools

Coping saw/ Jigsaw

Hand plane

Cross cut saw (hand saw)

Spokeshave

Orbital sander

Sanding blocks

Materials

Choice of hardwood walnut

Plywood 1/2 or 3/4

Wood glue

1/4 20 threaded inserts

String swing guitar holder

Teak oil/ tung oil/ polyureathane

Selecting your lumber

Pick out your lumber

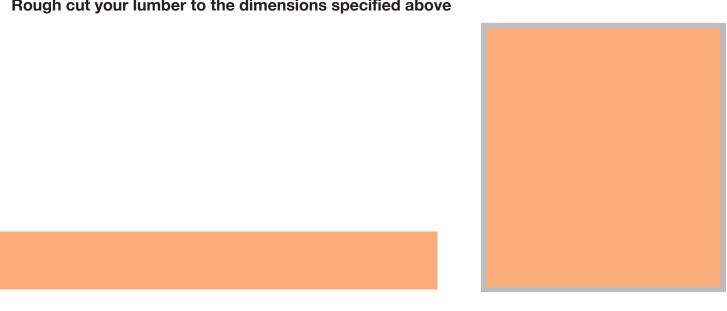
I use 5/4 Walnut Stock for my lumber as I like the extra thickness but you can use 4/4 which in actuality is a lot closer to \(^3\)/4 in thick. I built my first stand from 4/4 walnut stock and it will make cutting and routing quite a bit easier.

You will need a board that can give you a long piece that is roughly 6.5 -7 inches wide and 48 in long

In addition you will likely need to glue up a board to give you the width of 15.75 and a length of 17.5 in for the base piece.

Pick your lumber accordingly.

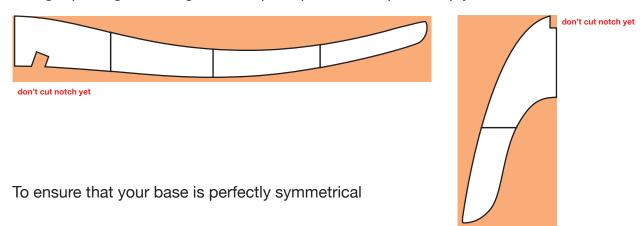
Rough cut your lumber to the dimensions specified above



Shaping the base and neck template

Laying out your templates:

Using the printable template, print at full size and cut out each piece. Using tape or glue arrange the template pieces on a piece of plywood



Take half of your template print out and find a piece plywood that is suitable in size

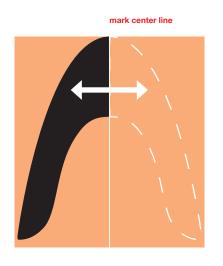
Trace only one half and perform your cut using a bandsaw, or jig saw.

Dont cut out the notch at the top of the base yet.

You should line up the half way line on straight edge so that you are not making that cut with a jig saw

Smooth all the curves using a sander and by hand.

Now you should have one half of the base that is perfectly shaped.



Cut full base

Cut out using a bandsaw or jig saw leaving at least 1/16 of an inch margin to your cut line

Flush trim your base

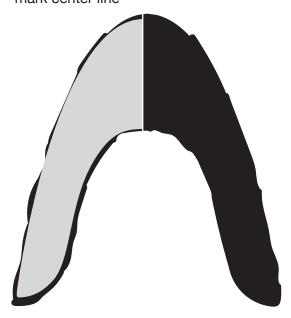
Using double sided tape or brad nails, secure your half template the the full template. Using a flush trim bit with a guide bearing, route the first half of your full template.

smoothed half template

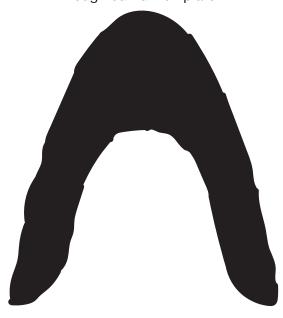


secure half template to full template using double sided tape or brad nails

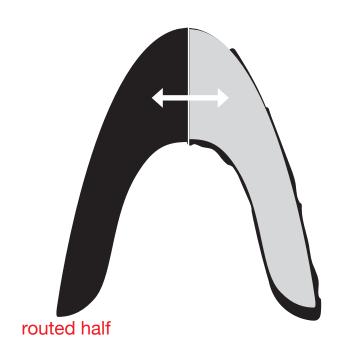
mark center line



rough cut full template



flip your half template and flush trim the other side



Hand held

Your bearing will be guided on the bottom



Flush Trim Router Bit, 1/2 Inch Sha-1/2 Inch Cutting Length Extra Long 4 Inch, Solid Carbide UP&Down Compression

Pros:

Cleaner faster cuts Safer end grain routing Sharper longer

Cons: More expensive



https://amzn.to/3FZuInv

Router table

Your bearing will be guided on the top



Straight bits are innexpensive but for routing dense hardwoods and end grain they can be very dangerous with kickback and

Pros: Cheaper

Cons:
Can't handle as deep of cuts
Prone to chip and tearout material
Dangerous





Using the template

At this point you should have a neck template piece that has been cut and smoothed, and base template that is symetrical and smooth



Using the template will be the same process you just did in making the base template.

However you will have to use double sided tape to secure your template to your workpiece.

First flush trim your neck and base piece, then use a roundover bit to achieve the desired amount of roundover.

I use a full 3/4 roundover bit on both sides, I try to do this in 3 passes leaving a light pass for the last to make sure any tear out and burn marks are removed. Most likely you will still have to sand out some imperfections with an orbital sander.



Avoiding Kicback

If you are using a compression bit or a spiral bit then you have an extra degree of safety, however you can still get lots of kickback going around tight curves on end grain.

Template Cutting Essentials

Maintain constant downward pressure and pressure against your flush cut bit

Never attempt to start a cut on end grain

If you loose pressure and need to restart a cut its best to feed into it from a section you have alread gone over

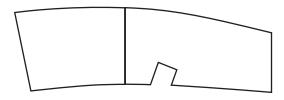
Make sure your template piece is securely attached to your workpiece

Cutting the notches

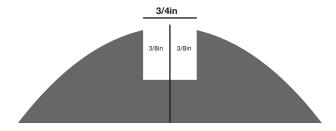
Find the thinkness of your neck piece and base piece using a combination square



Use you printed out paper template to locate the location of the notch on your neck piece



Use the center mark on your base template to locate the center and mark your notch thickness from



Use a handsaw and a chisel to remove the waste Error on the side of having a tight fit and fine tune with a sanding block or chisel

Inserting the Threaded Insert

Using an awl, mark the center of your neck stock, about 4 3/4in from the top. You will need a 1/4 20 threaded insert if you are going to be using the String Swing guitar holder.



Using a 5/16th Brad Point drill bit drill the hole carefully.

Pro Tip. To avoid tear out start with the bit in reverse and sever the fibers down to the first mm.





Finishing

For the finishing you can take it as far as you care to. If you want a high gloss finish, apply multiple coats of wipe on Polyurethane, sanding with 320 or 220 lightly.

If you like the look of a more Satin or oil rubbed finish, I have really been loving the simplicity, not to mention the odor of just Boiled Linseed oil with a tiny bit of Mineral Spirits. I generally do about three coats of this for a natural oil rubbed look.

