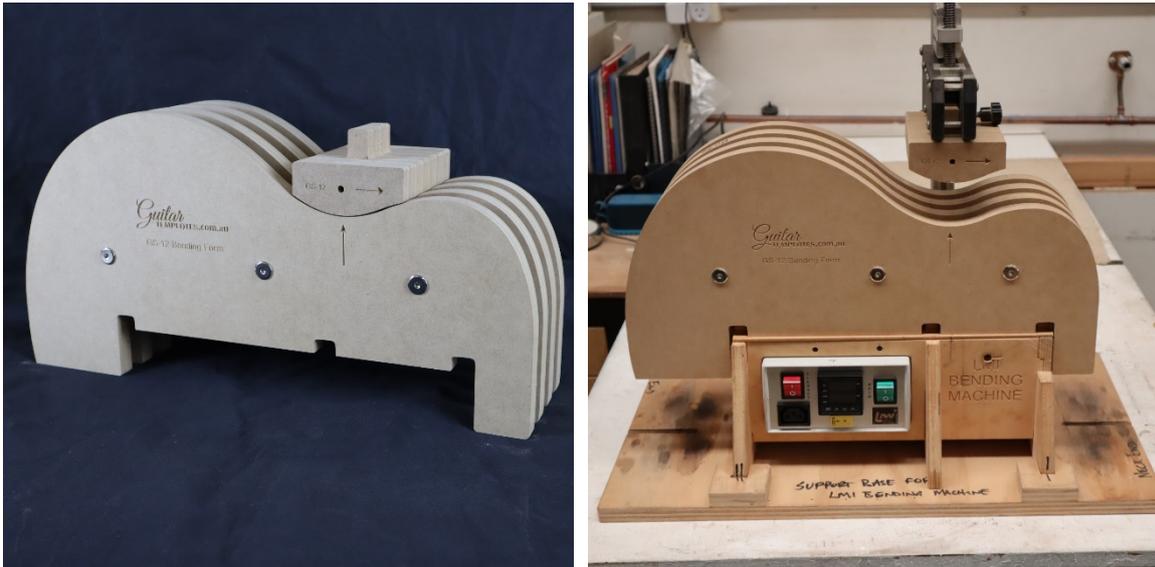


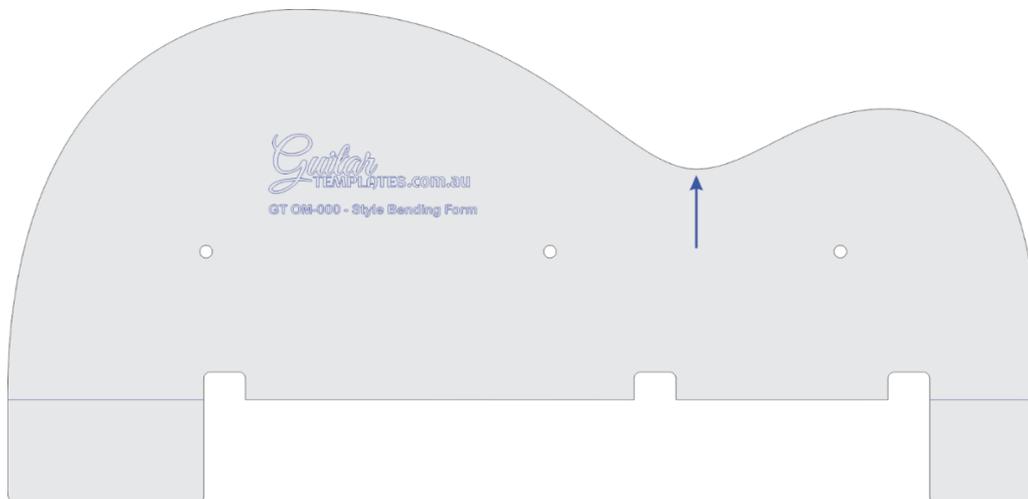
Using the GT Side Bending Form Templates

Guitar Templates can create templates to enable you to make accurate bending forms to match the acoustic guitar templates that we sell. This document explains how to use the templates to make your own bending forms like this one.



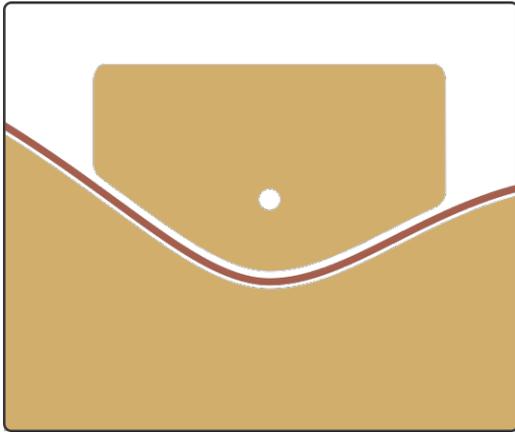
Because we have one in our shop, we've used the LMI Bending Machine base as the base for our forms. See the photo below. It is not essential that you have the LMI machine, you can still use the templates to make a bending form and create your own base. Consider leaving the bottom edge flat; you won't need a separate base. We have more than a dozen guitar shapes and bending forms in our workshop so making the forms fit the LMI base means they all align at the waist and work with the bending machine. You may not need to do that.

The main template looks like half a guitar body in shape.



The shape is 3mm inside the actual guitar shape to allow for the thickness of the sides and the steel slats used to support the side while bending. The caul for the waist (and cut-away if supplied) is

2mm outside the actual guitar shape to allow for the thickness of the heating blanket and the steel slats. In other words, there is an allowance of 5mm for the total thickness of the sides plus heating blanket plus steel slats between the caul and the form. See the graphic below.



The form template has three holes in line that are sized for a 6mm threaded rod to hold the form together. If you prefer to use $\frac{1}{4}$ " rod, then drill the holes out accordingly. The horizontal line is on the centreline of the guitar body so there is an allowance of ~50mm extra at either end.

In the photos below, we have used standard 6mm threaded rod and M6 furniture nuts to hold the form together (coz they look neat), but any nuts



and washers will work. The form is assembled from 4 pieces cut to the shape of the main template. We typically use 18mm MDF but 16mm will also work. Just consider the final width of the form that you require. We shoot for around 125mm or 7x18mm layers. Between the four main pieces there are spacers cut from scraps of the same 18mm MDF. We used a hole saw to cut ~50mm dia round spacers but any shape will do and around 50x50 is a good size. You'll need 9 of them.

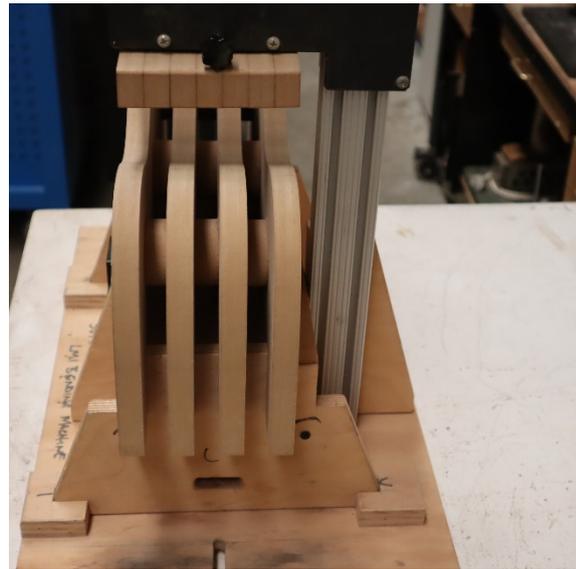
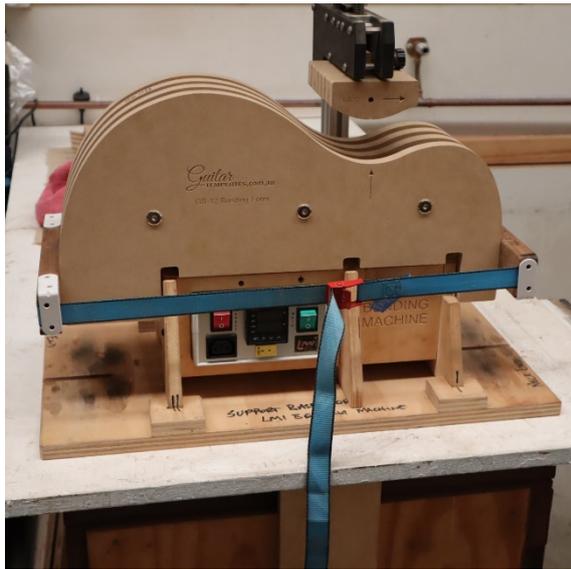


We recommend that you rough out the main template pieces on the bandsaw or a jig saw and then use the template to accurately shape one of them on the router table. Use double-sided tape or screws to hold the template to the MDF. Then use the first shaped piece as your template for the remaining three pieces. Drill the 3 x 6mm holes in the first piece using the template to locate them, then you use some 6mm threaded rod (or wooden dowel) in these holes as you progress to keep each of the four layers aligned.

With the four main pieces cut to shape, make up your 9 spacers with 6mm holes centred and then assemble with three lengths of threaded rod and appropriate nuts keeping everything aligned.

The caul for the waist can be made the same way with 4 shaped blocks and spacers between. Because we use the LMI bender, we've made our caul blocks with a bar section on top that fits into the opening of the cross beam that clamps down over the waist. If you want to do the same, once you've got the caul made up, simply glue a block to the top of the caul to suit. You can clamp down

the caul in many ways to bend the waist of your sides that don't require the LMI machine. You could use two quick clamps, one on either side or a tie-down strap similar to those we use to clamp the ends down after bending (see picture below).



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