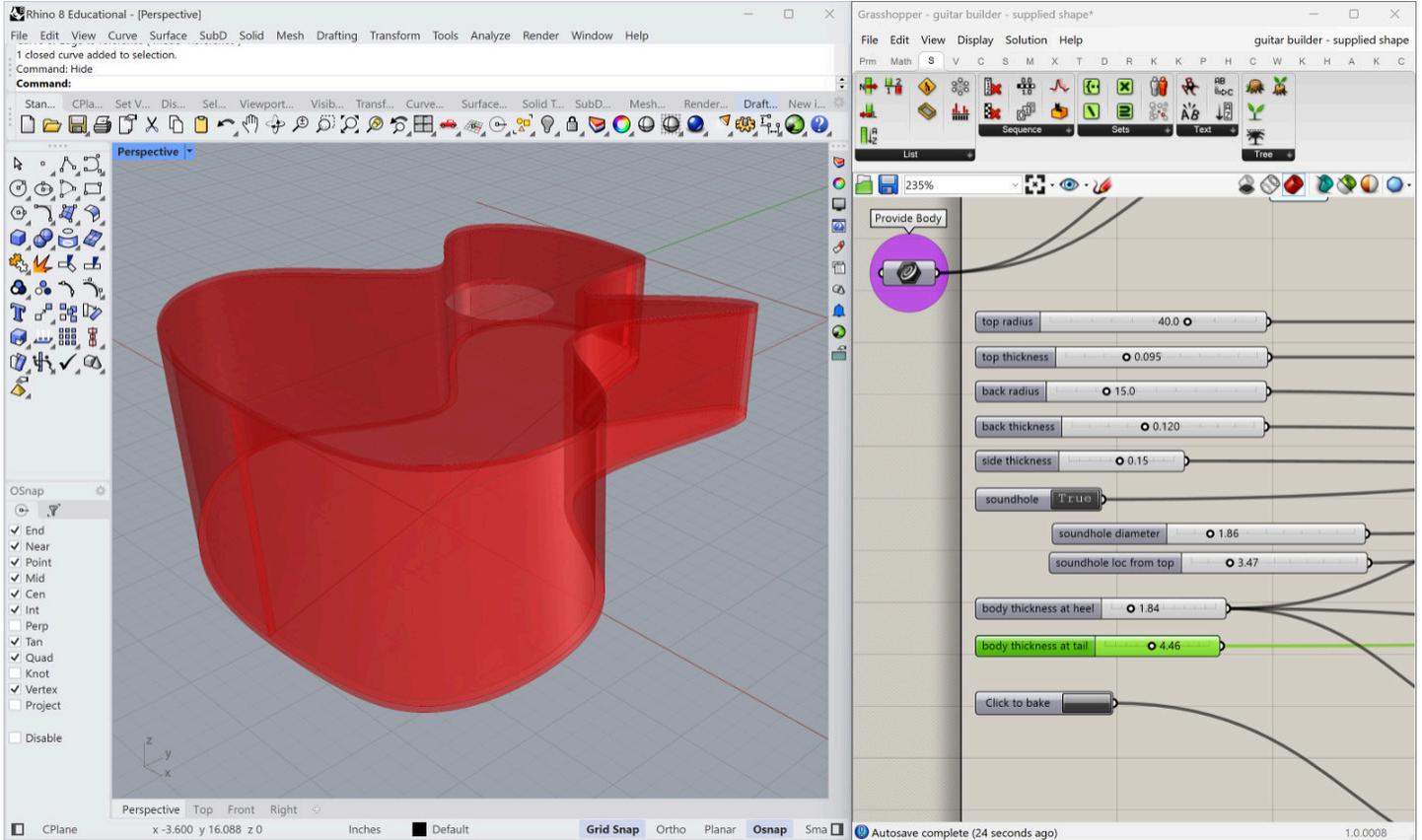


The **Guitar Shapeshifter for Rhino3d** and **Grasshopper** will take a curve you draw and create a guitar body from it.

The parameters you can control are:

Top and back radius, top and back thickness, whether it has a soundhole, soundhole diameter and placement, thickness of sides, and neck and heel thickness.

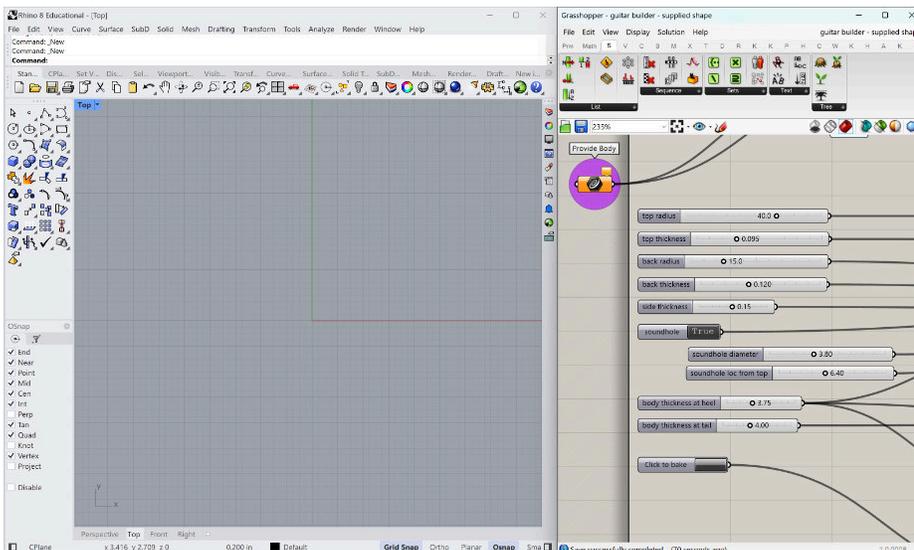
This routine depends on two additional plugins: *Human* and *Pufferfish*



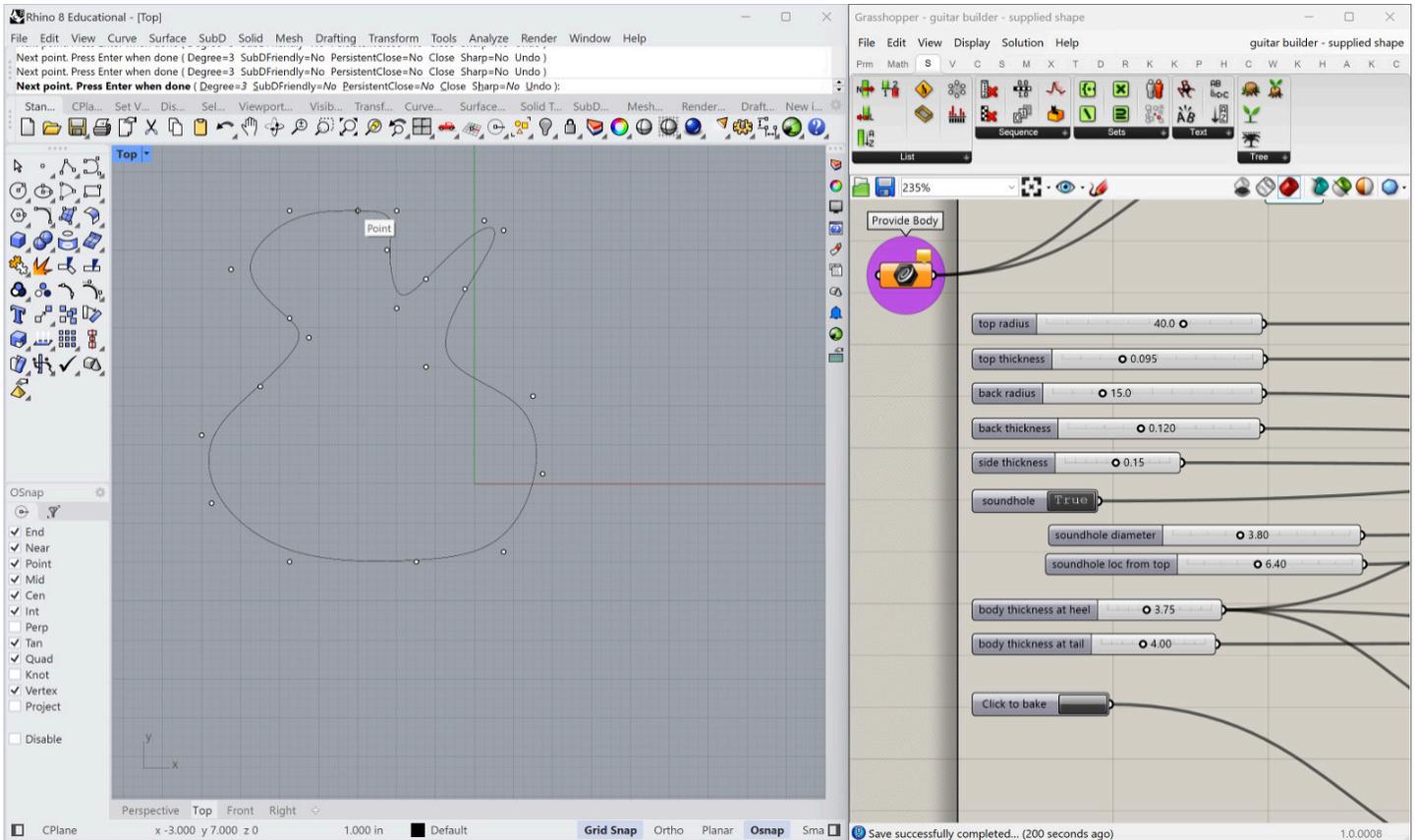
To use the tool, open a blank Rhino document, or a Rhino document that contains the body shape you want to use.

Open Grasshopper and open the Guitar Shapeshifter.gh file.

Place the windows side by side.

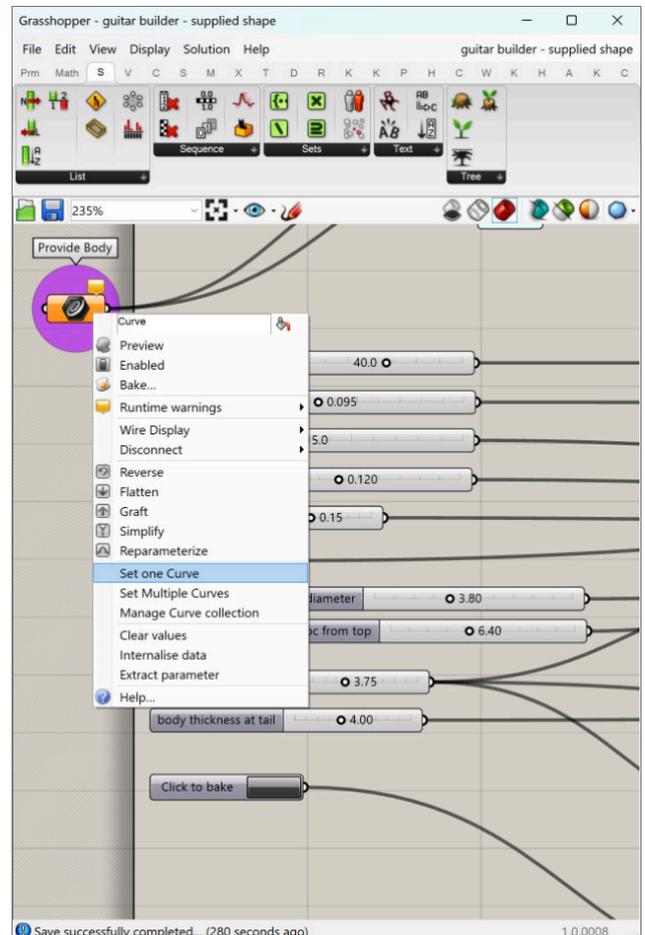


Draw your desired shape in the Rhino workspace.

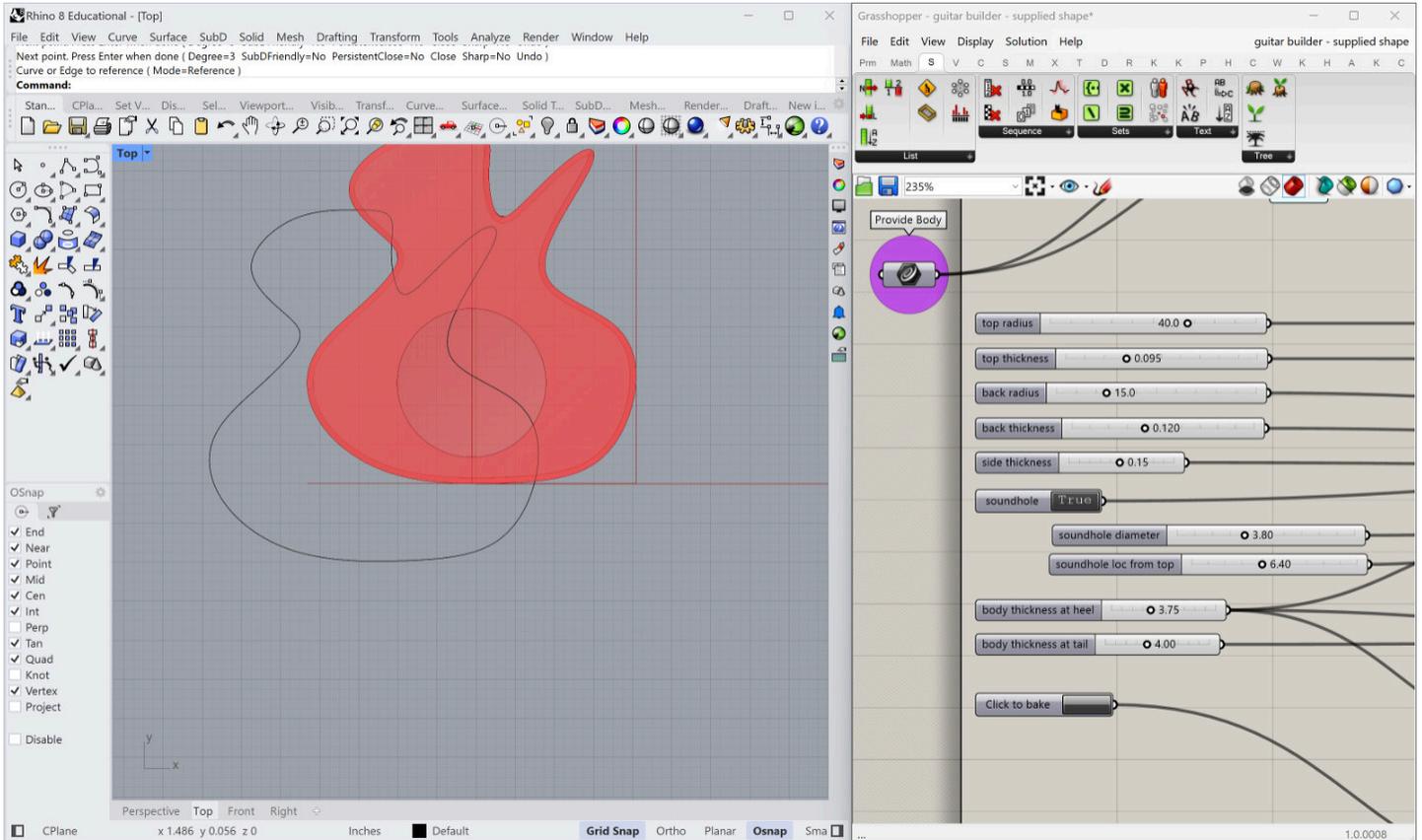


Be sure your shape is a joined, closed curve. Once you have the guitar of your dreams, go over to the Grasshopper window, and right-click the "provide body" curve container in the purple blob. You should see the context menu shown on the right appear.

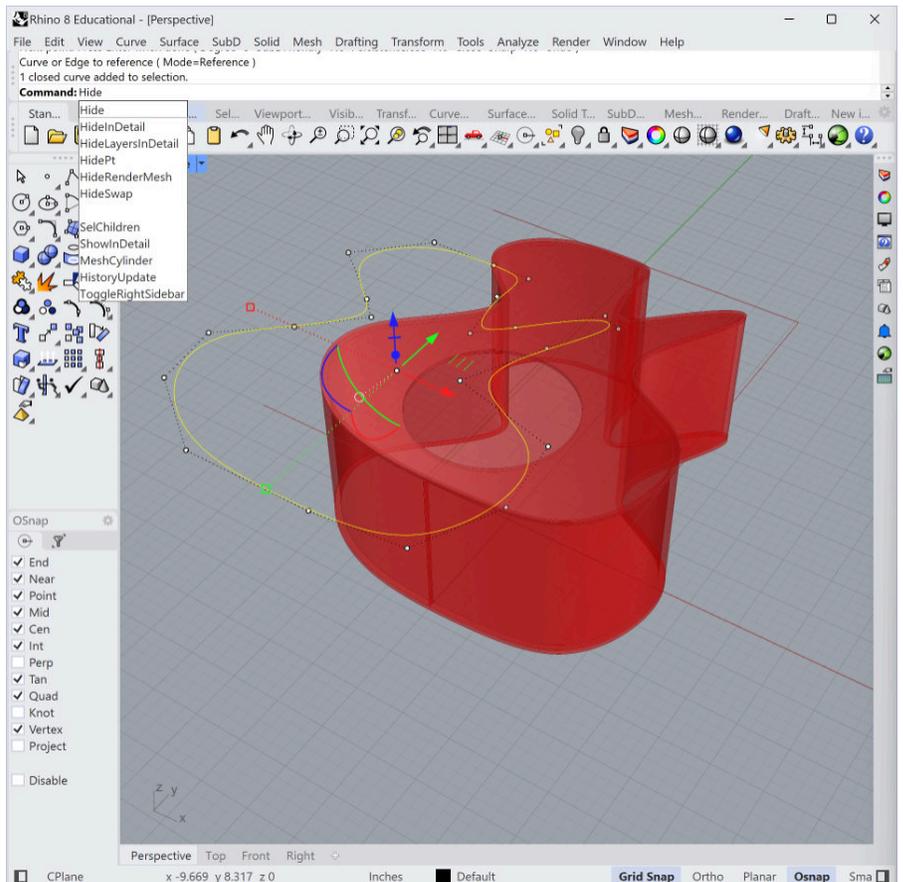
Go down to "Set one curve" and click on it.



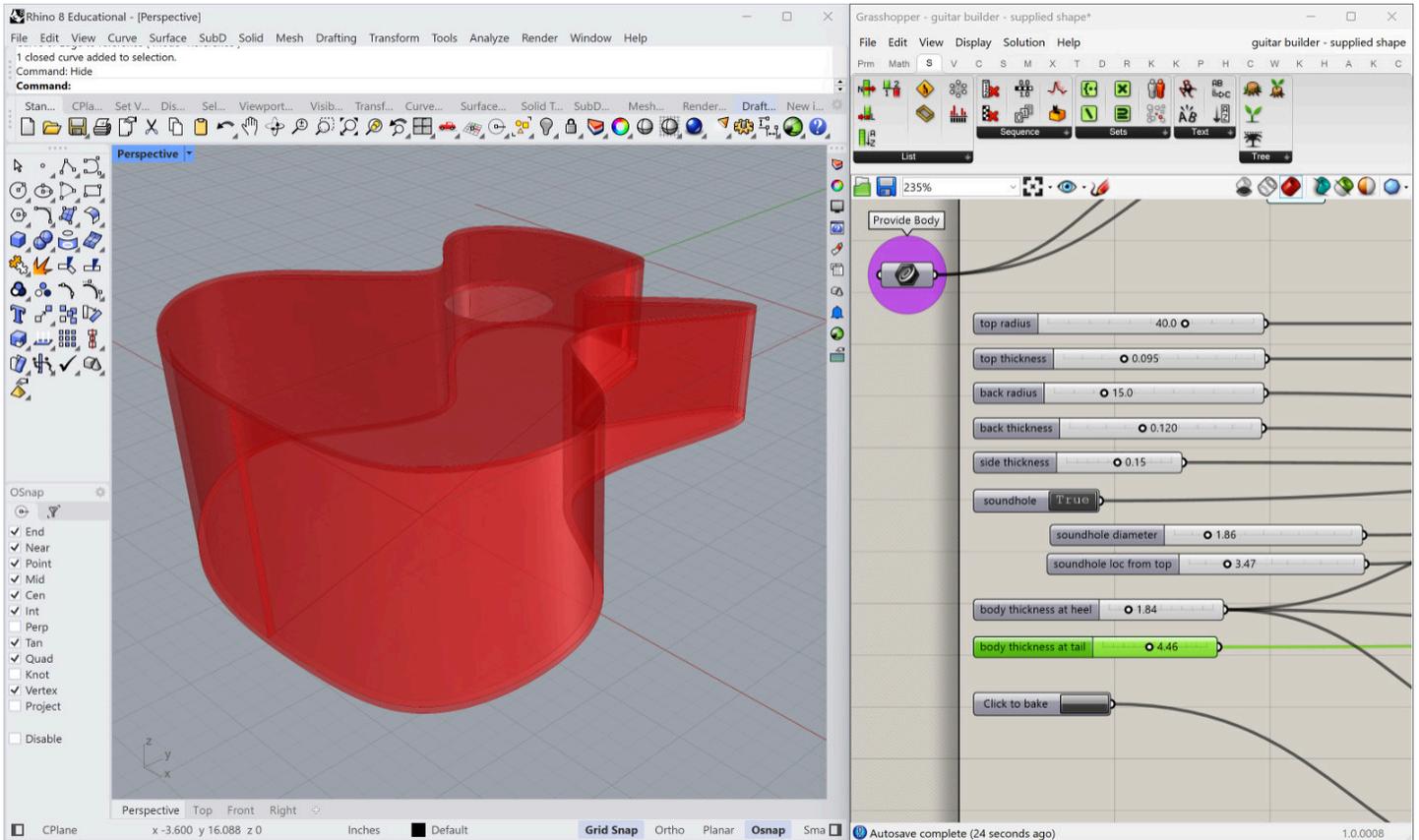
After clicking “set one curve”, click on the curve you drew in the Rhino workspace. You will see your guitar shape appear in red, with the bottom most point located at World 0,0,0.



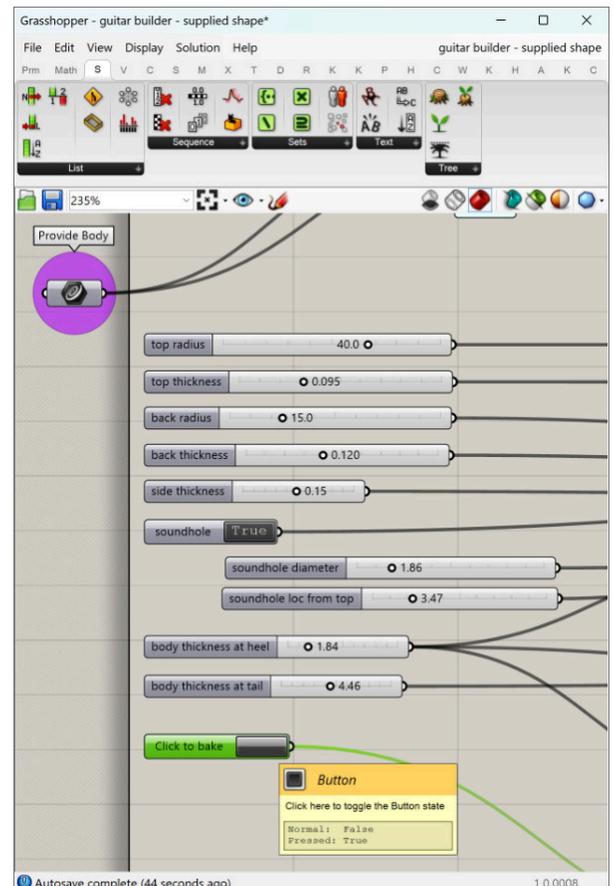
Switch to perspective view and you will see your body in 3d. It's a good idea to hide your original curve at this point, click on the curve and type “hide” in the command input to hide it.



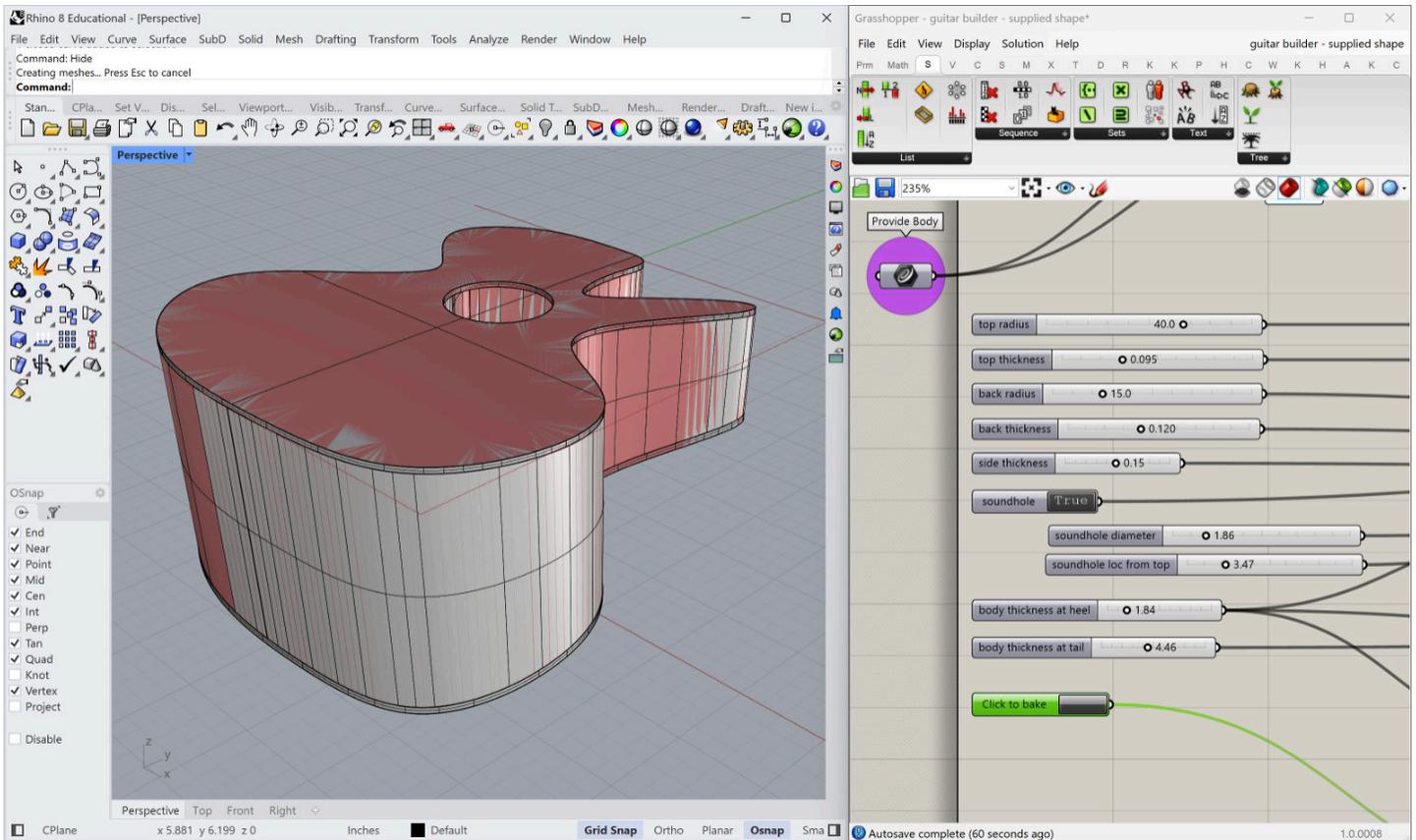
Adjust the sliders in the Grasshopper window to set the parameters for your body. The model will change in real time.



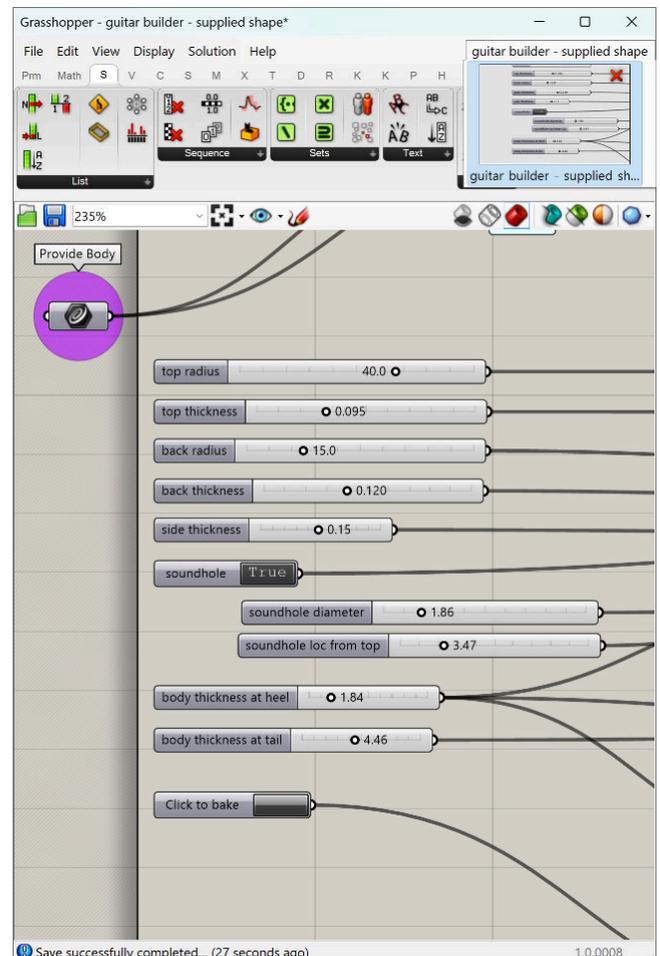
To convert your body into Rhino objects that you can manipulate as usual, head down to the "Click to bake" button in the Grasshopper window. Click the button.



Your Rhino window will now look something like this:



To close the Grasshopper routine, go back to the Grasshopper window and click on the "Guitar Shapershifter" text in the upper right and click the red X. This will close the Grasshopper routine and remove the red object from the Rhino workspace. You can now close Grasshopper.



You can now manipulate the objects as usual in Rhino. Enjoy!

