**STANFORD
PRODUCT
REALIZATION
LAB**

Customizing the Starter Box

The "Starter Box" is a great way to get started with learning a bit of software, and having a hands-on experience running the laser cutters in Room 36. These files are designed to work with 1/8" basswood sheet—the pieces will fit together snugly without any glue! This material is available to purchase in the lab in 6"x48" sheets.
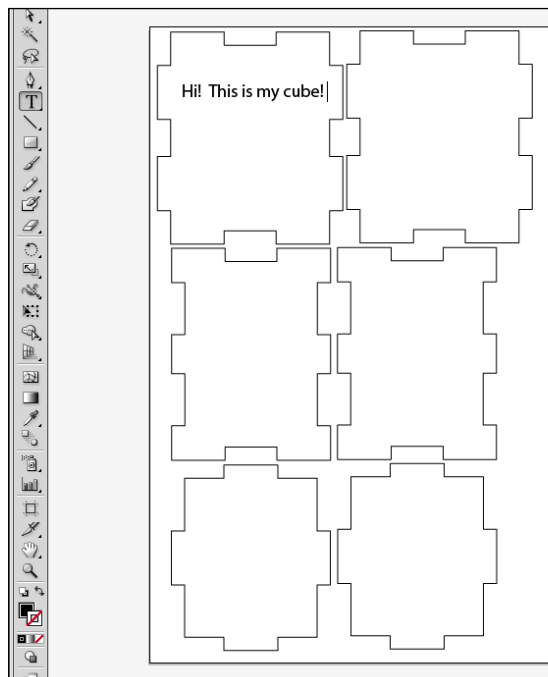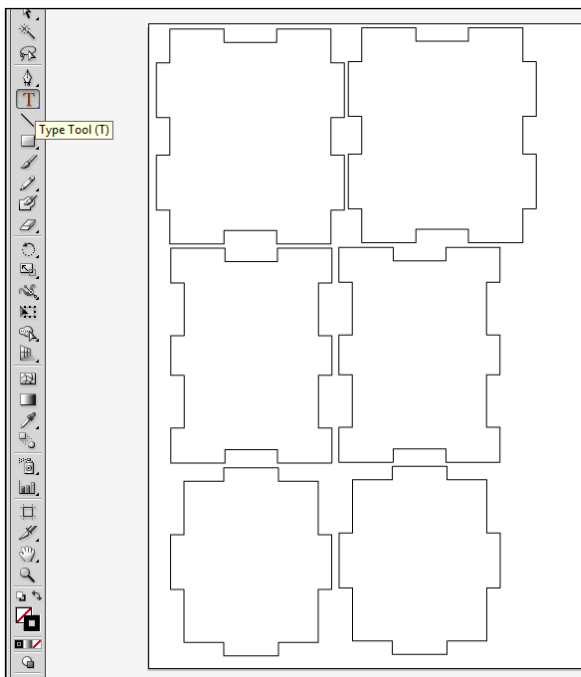
There are 6 files provided in the "Starter Box Basswood Cube" folder:

- 1 Adobe Illustrator file
- 3 SolidWorks Part files
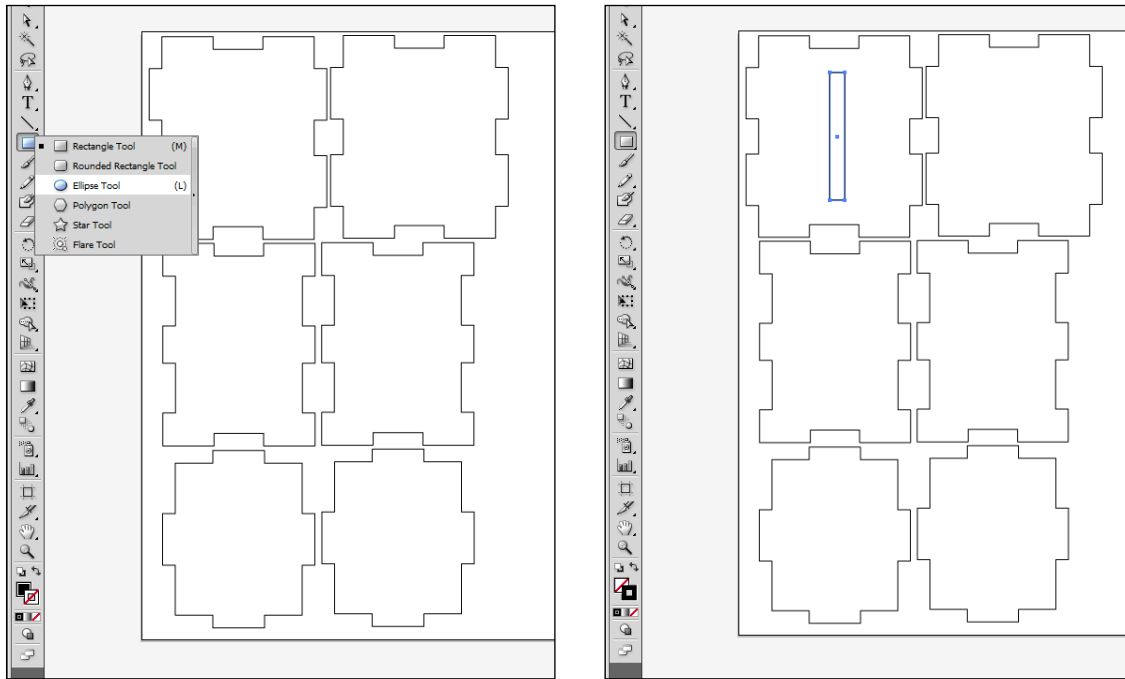- 1 SolidWorks Assembly file
- 1 SolidWorks Drawing file

Adobe Illustrator

If you want to get started right away, you can start with the Adobe Illustrator file. You can easily add text, holes, or other features to the cube pieces in this file. Generally we do not suggest trying to change the size of the box using Illustrator—the size of the tabs is dependent on the material thickness and is very critical to the box fitting together properly, so the parts cannot just be scaled up.

Adding text: Click the "T" tool, then click when you'd like to add text. You can then edit the size, font, etc.
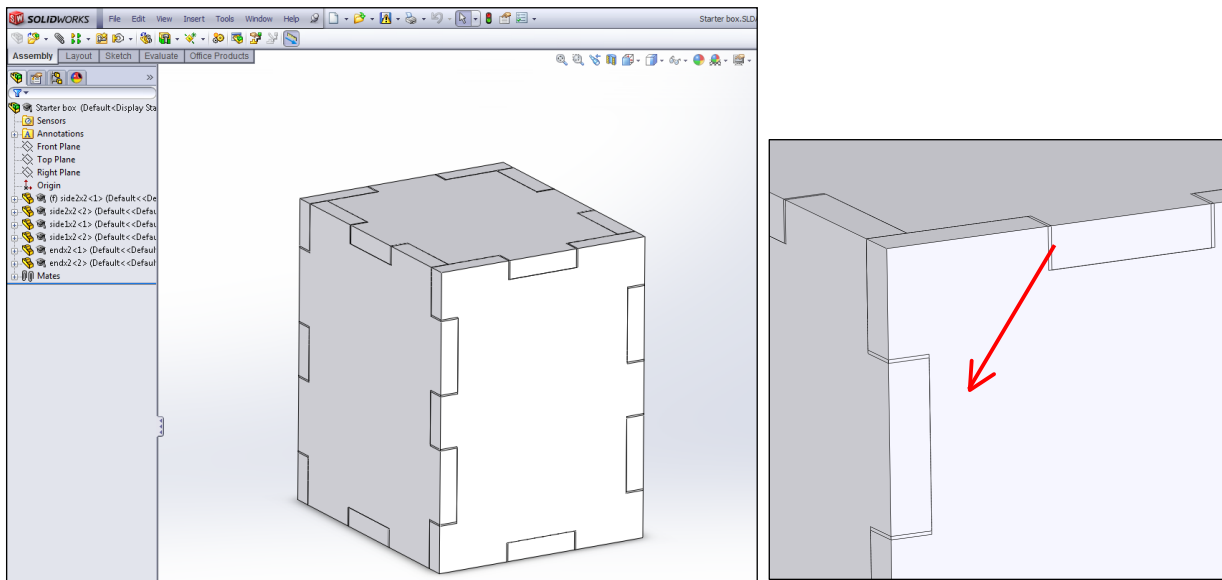
Adding holes: Click and drag on the Rectangle tool to see the various shapes that are available. You can create any shape you want by either double-clicking to select available options, or by clicking and dragging in the page area. The size of the shape can be edited after it is created.
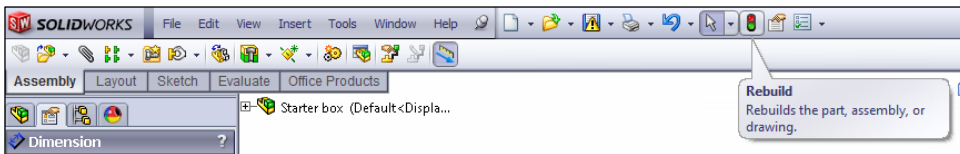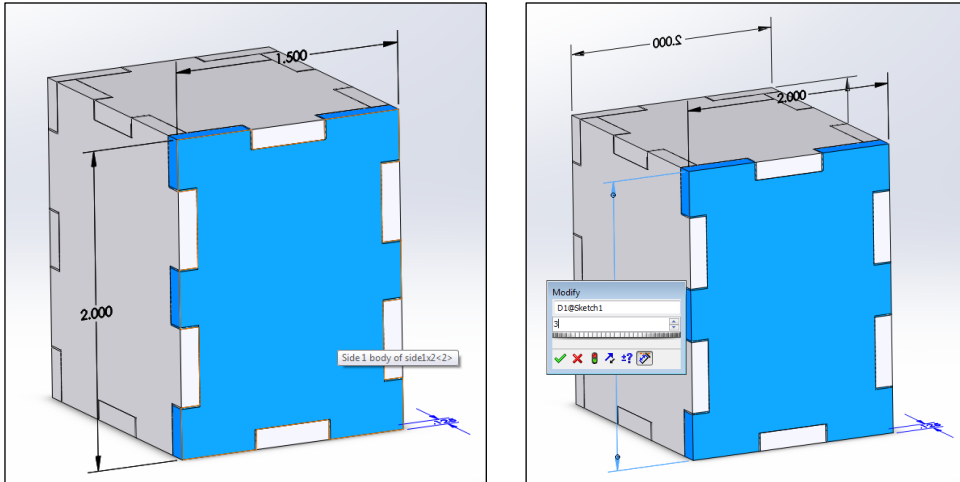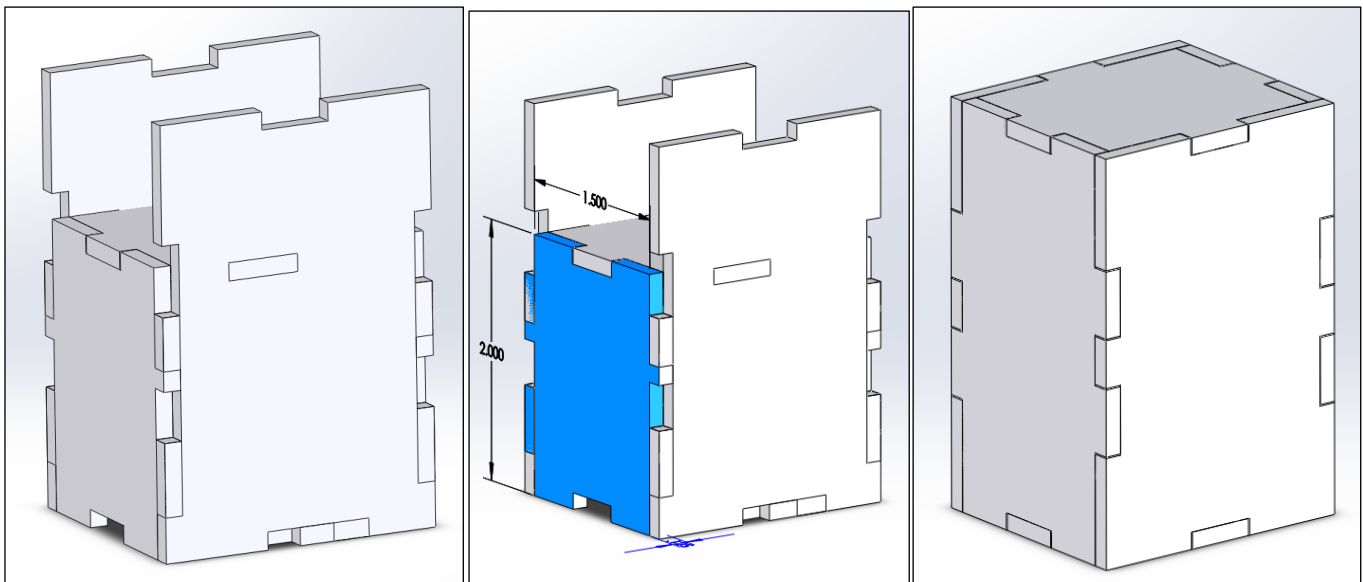

SolidWorks

If you would like to change the size of the box (please note that the 1/8" basswood sheets available for purchase in Room 36 are 6" wide), SolidWorks is a great tool to use. Open the Assembly file. You'll notice that the tabs overlap the slots each other a bit (see image below). This is to account for the material lost during the laser cutting process.
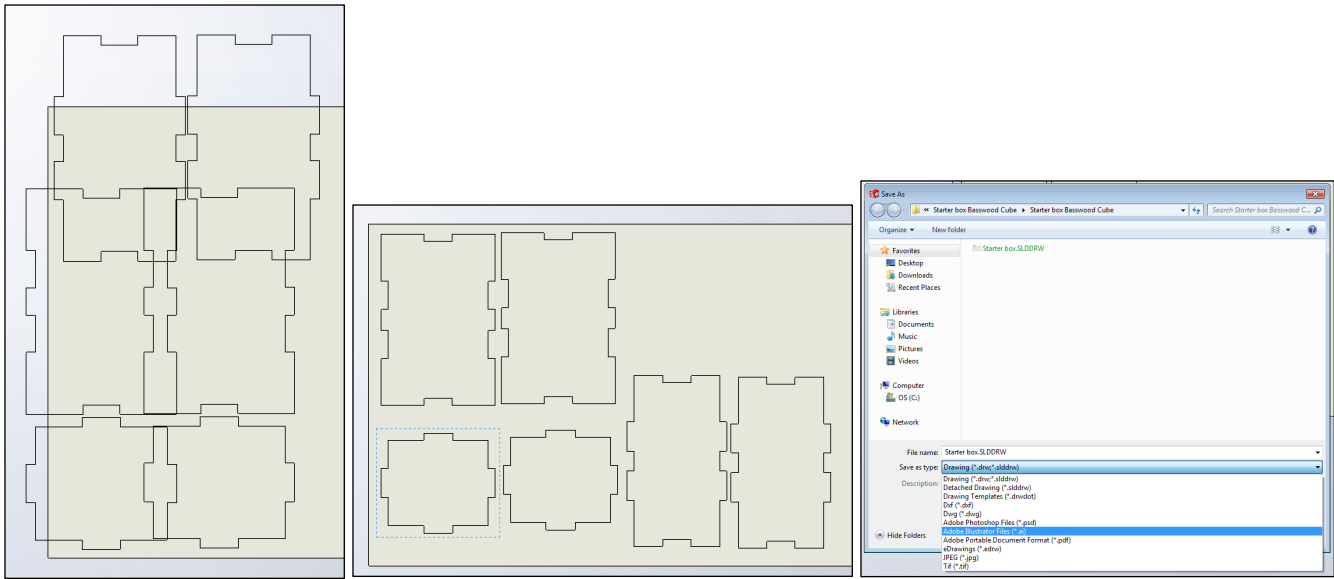
Editing the Parts in the Assembly: Click on the first part you want to edit. The dimensions of the part will display. You can click on each dimension you want to change. Click on "Rebuild" at the top of the page to reflect the change.

You'll notice the parts will update to reflect your change. Continue to update the other parts to ensure that the sides line up properly.

Updating the Drawing file: Open the Drawing file from the downloaded folder. The Parts in the Drawing will reflect the changes you made in the Assembly file. You'll want to click and drag the parts to separate them. "Save As" an Adobe Illustrator file.

Once you've edited the cube files, you can edit them in Adobe Illustrator to meet the vector cutting, vector engraving, and raster engraving requirements.