

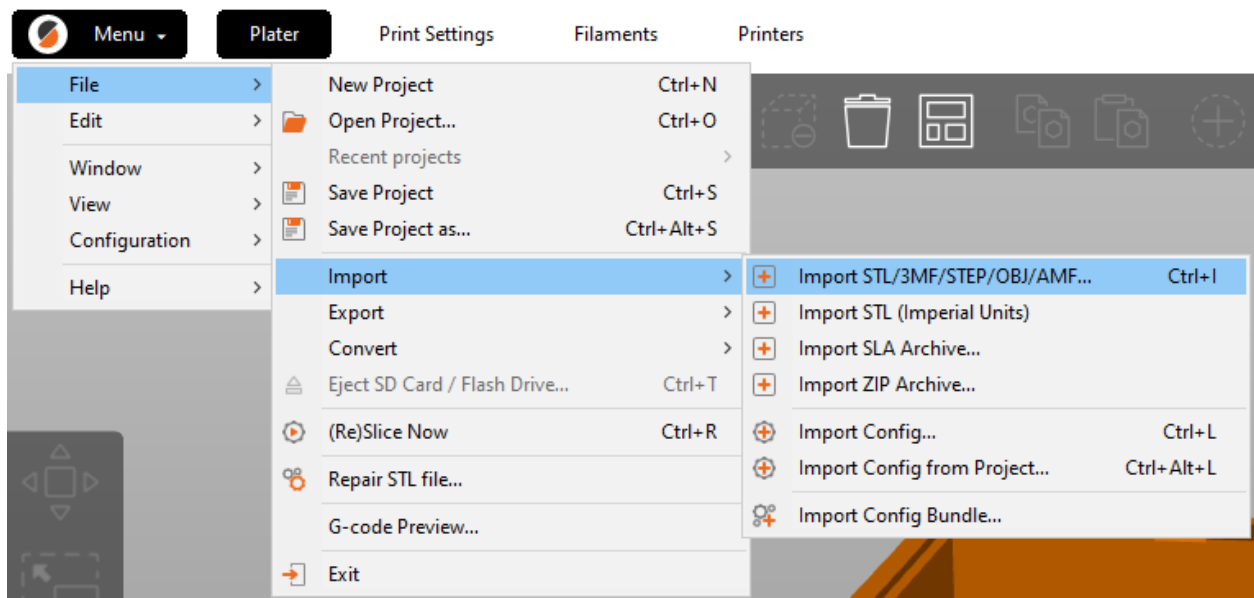
Prusa 3D Printing Guide

“I have a file and don’t know where to start”

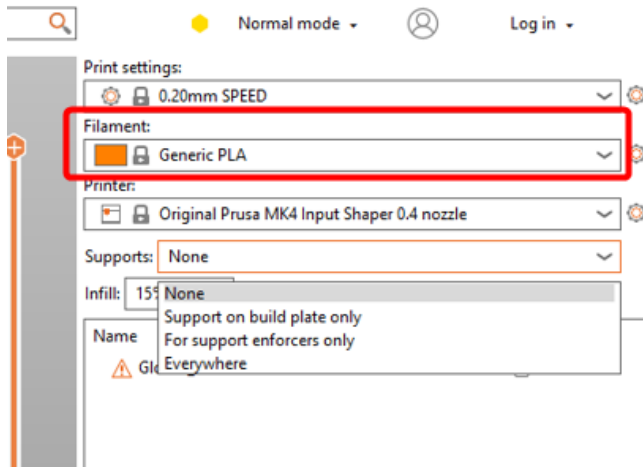
Print preparation steps

Preparing your file

1. Download your file onto the computer desktop.
2. Open **PrusaSlicer**.
3. Go to the **File** menu.
4. Select **Import**.
5. Choose **Import STL/3MF/STEP/OBJ...**



6. **Arrange** and **Scale** your print as needed. For more details on the tools in the program, go to [page 6](#)!



7. If you are using Silky Colored PLA, change the filament settings.
8. Once you're happy with the file arrangement, select the **Slice now** button located at the bottom of the Print Settings side panel.

Checking your slice

1. Make sure there are no warnings. The most common warning is a stability issue, which means your 3D print needs supports.
 - a. If you are unsure what type of support to use, or if you see a different warning, ask a Makerspace Student Assistant for help.
2. Write down the weight next to **Used Filament (g)** and the time next to **normal mode**. Include this information on the 3D printing form.

Sliced Info	
Used Filament (g)	310.58
Used Filament (in)	4099.65
Used Filament (in ³)	15.28
Cost	7.89
Estimated printing time:	
- normal mode	8h4m
- stealth mode	9h12m
Export G-code	

Note: After making modifications to your file, you must select **Slice now** again.

Selecting and weighing your spool of filament

1. Turn on the scale located by the window in the 3D Print Lab.
2. Place an empty spool on the scale to measure its weight.
 - a. Empty spools are stored under the table near the scale.
3. Press **TARE** to reset the scale to zero.
4. Remove the empty spool and place your filament spool on the scale.
5. Check the displayed weight. This is the amount of filament left on the spool. Make sure it is greater than the required weight for your print.

Transferring your print to the 3D Printer

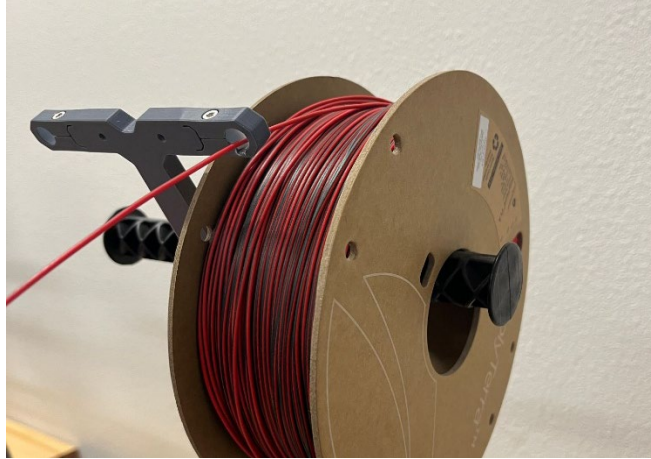
1. Select **Export to G-Code** and save the file to your USB drive.



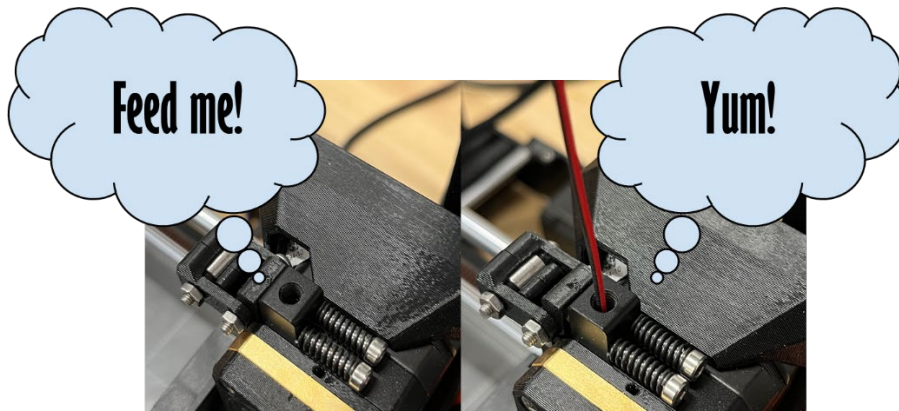
2. Safely eject the USB drive from the computer.
3. Take the USB to a Prusa printer.
 - a. If the printer is off, turn it on using the power switch located on the back right side of the machine.

Loading the Prusa 3D Printer with filament

1. Place your spool on the spool holder so that it spins toward you and the filament passes through the gray guide hole.

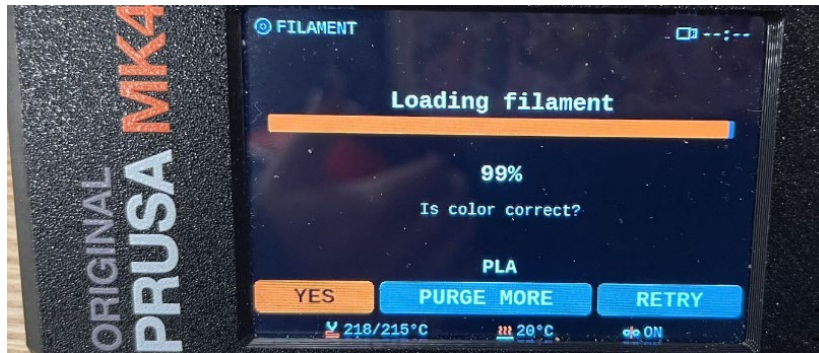


2. Insert the filament.
 - a. Push the filament into the hole on the print nozzle until you cannot feed it further.
 - b. The printer will detect the filament and ask which type you are using. Select **PLA**.



3. Purge and check the filament.
 - a. As the filament loads, hot material will be extruded. Do not touch it.
 - b. Use pliers from the tool drawer to remove the extruded filament.

4. Confirm that the color is correct. If not, select **Purge More** until the correct color is extruded.



5. Start your print.
 - a. Insert the USB into the Prusa printer
 - b. On the display, select **Print**.

Proper filament spool storage

When putting away a spool of filament, thread the filament through the holes of the spool. This reduces tangles and breakage.



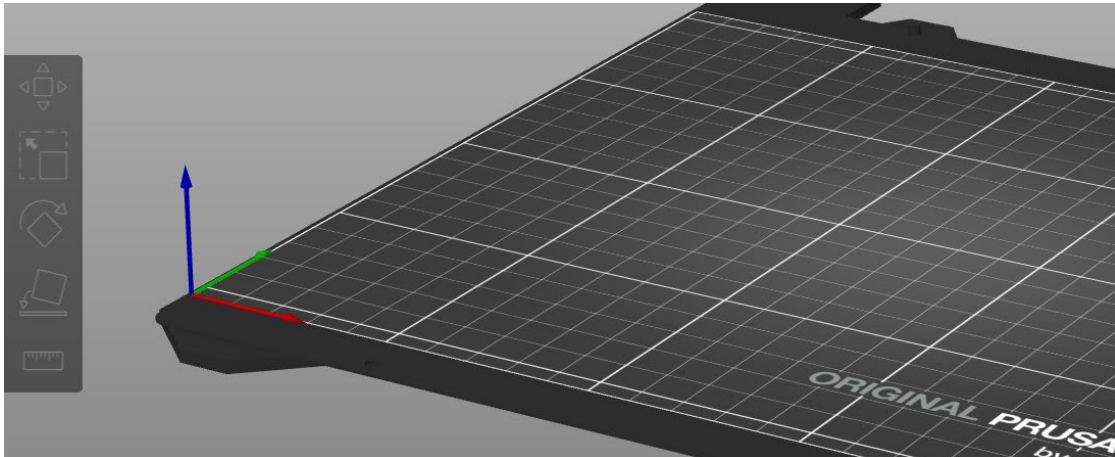
Note: We recommend you observe your print and make sure it begins printing. After a few minutes of calibration, you should see filament being piped out and sticking to the print bed. Many failed prints happen in the first 15 minutes!

Want to learn more about 3D printing? Sign up for our 3D Printing Workshop on the University Libraries website!

Prusa 3D Tool Guide

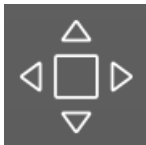
“I’m looking at the program but I am unsure what the tools mean”

Open the file you want to manipulate. If there is no file in the program, the tools will be grayed out.



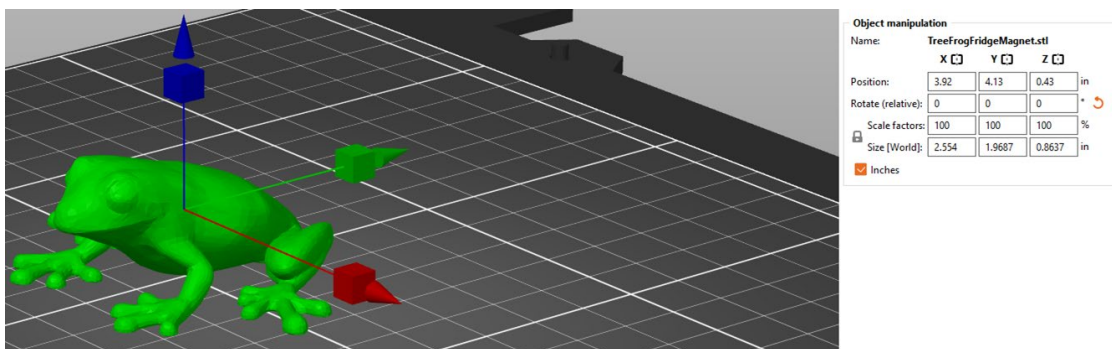
Tool descriptions

Move tool



The Move tool lets you reposition your model on the build plate.

- Select the **Move tool** to display arrow handles on the model.
- Drag an arrow handle to move the model along that axis.
- You can also enter X, Y, and Z coordinates in the **Position fields** within the Object manipulation box.

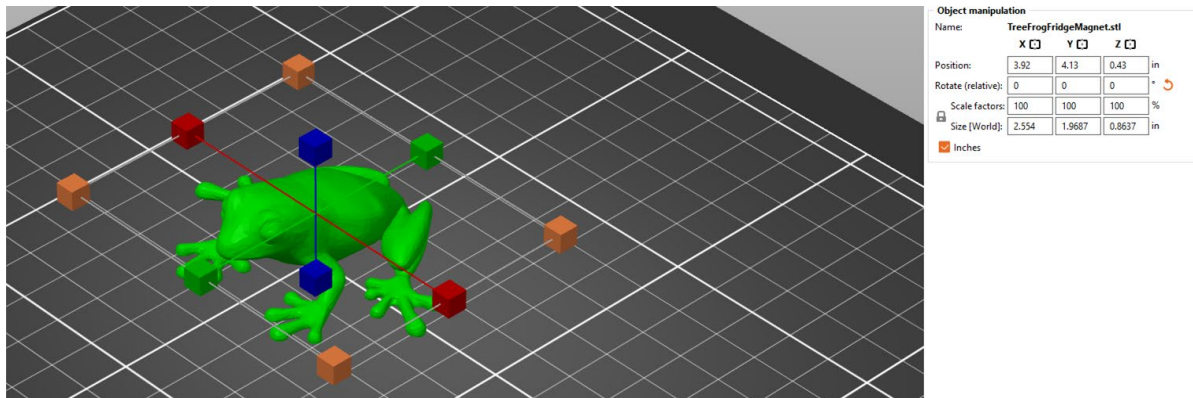


Scale tool



The Scale tool allows you to size your model as needed.

- Select the Scale tool to display scaling handles (cubes) on the model.
- Resize the model:
 - Drag an orange corner cube to scale proportionally.
 - Drag a colored axis cube to scale along that axis only.
- Enter exact values in the Scale factors panel or type target dimensions in the Size fields.
 - These fields appear in the model settings area of the interface.
- Below the scaling factors are the dimensions of the print once it is printed.



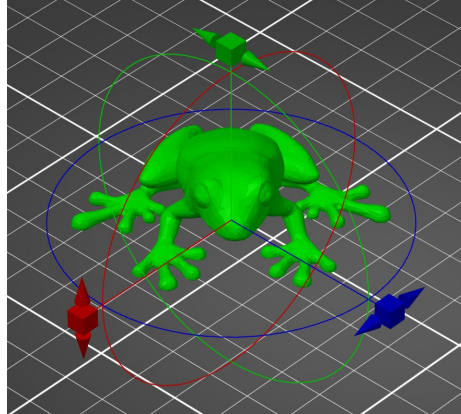
Rotate tool



The Rotate tool lets you change the model's orientation on the build plate.

- Select the Rotate tool to display circular rotation guides and cube handles around the model.

- Drag a cube handle along one of the rotation guides to rotate the model around that axis (X, Y, or Z).
- For precise adjustments, type rotation values in the Rotation fields within the model settings area.
- To reset the model's orientation, use **Reset rotation** in the same panel.

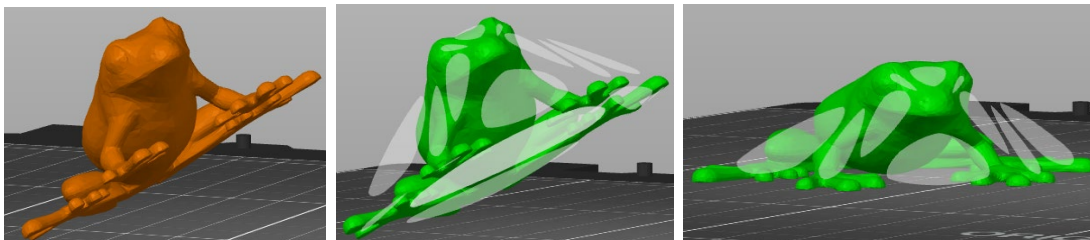


Place on face tool



Lets you choose which surface of your model rests on the print bed.

- Select the tool. A transparent circular highlight appears over the selectable surfaces.
- Click a highlighted face to set it as the bottom of the print.
- Use the flattest surface for best stability and bed adhesion.



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