

Customizable Alphabet Puzzle

December 01, 2024



Overview

This customizable alphabet puzzle lets you type any name or word in MakerWorld to generate kid-safe, rounded letters designed for Montessori-style learning. Features include adjustable size, fonts, borders, thickness, and a unique “Bubble Weight” option for chunkier, safer blocks. Plates and letters can be printed separately or together, with optional two-color plates for clear finger-tracing. No supports are required, and the default Fredoka font was chosen by education experts to support early literacy.

⚠ Safety Warning: Choking hazard – small parts. Not suitable for children under 3 years. Adult supervision required.

Credits / Licensing

Design by PixelFanLabs – With a curious mind, integrity, and your hands in the soil, you can create anything.

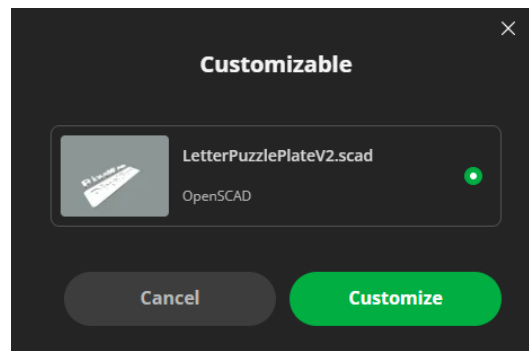
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Customization and Print Guide

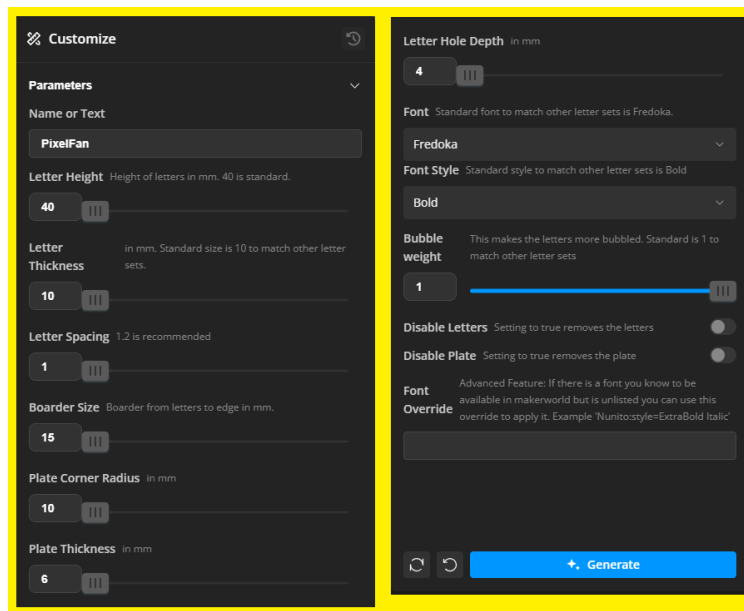
1. Go to the MakerWorld and find the model.

<https://makerworld.com/en/models/2062425-customizable-alphabet-puzzle-type-any-name>

2. Select “Customize”. When present with the pop-up, select the model and select “Customize”.

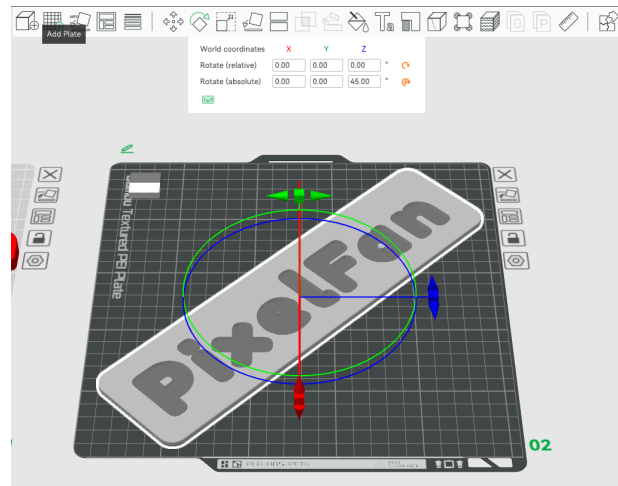


3. Customize the design using the parameters on the bottom left. Press the “Generate” button to preview your design.



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4. If the design is slightly too wide for the build plate, you can rotate it 45deg in MakerWorld to get more length.



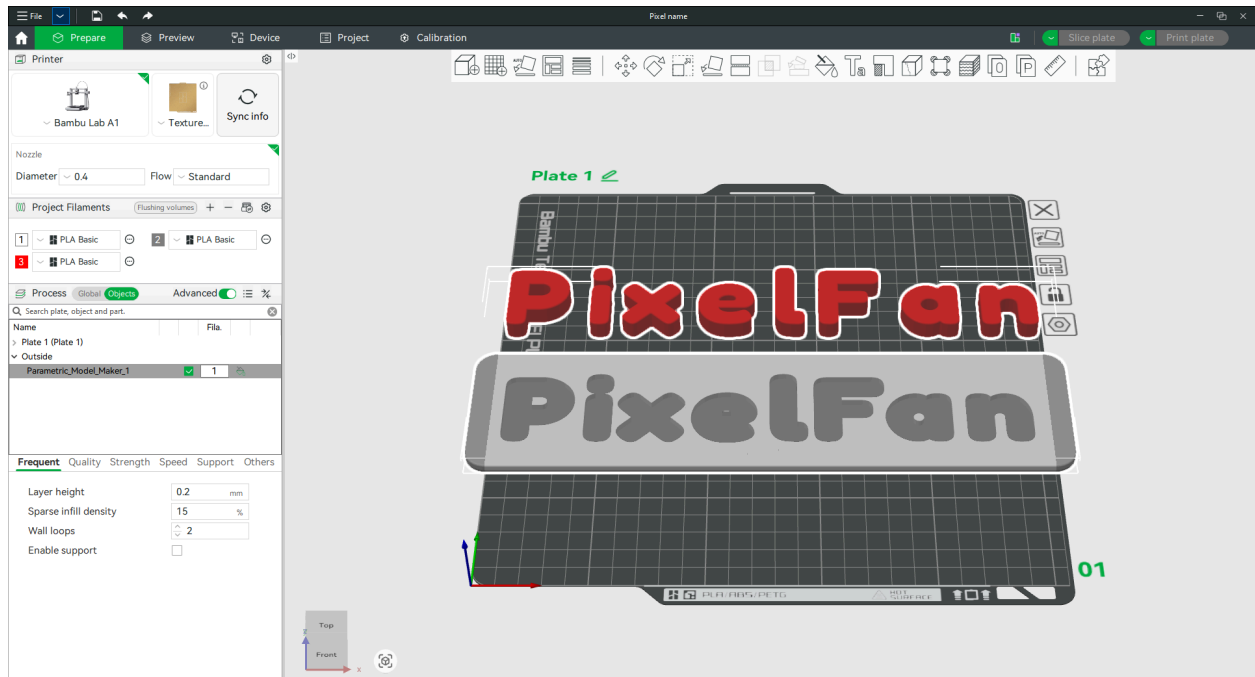
5. You may notice that the letters do not line up with the letter on the base plate. This is due to kerning while separating the letters so that they can be colourized as different objects in MakersWorld. Rest assured, the letters will fit correctly once printed.



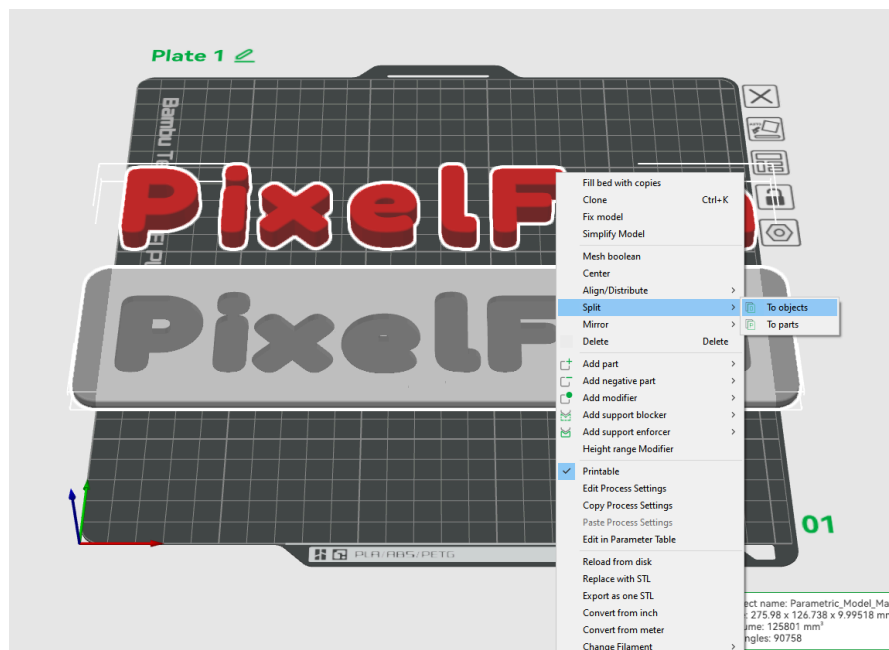
6. Once you are happy with the design select Download on the top right corner and download the design as a .3mf file.

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7. Open the .3mf file in Bambu Studio.

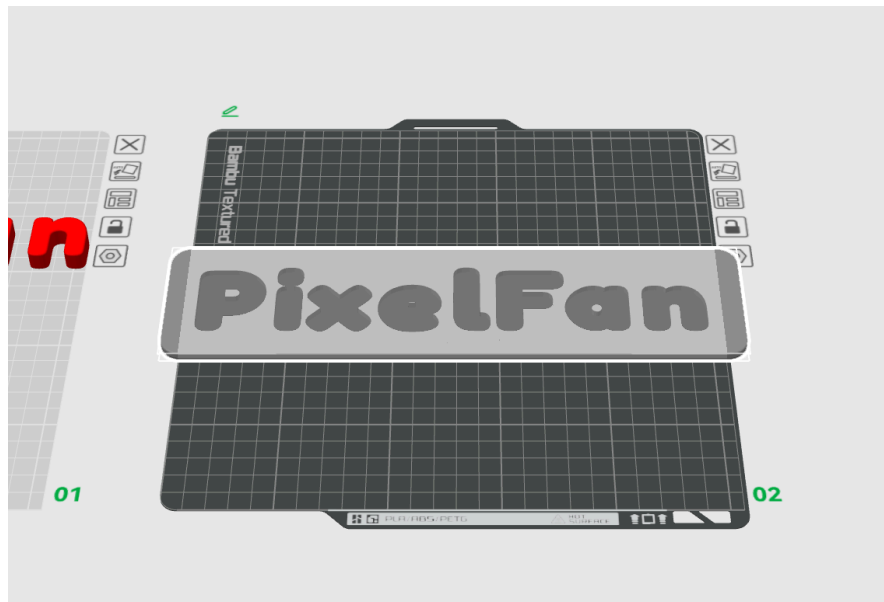


8. You will notice that the design appears as 1 object. Right click on the object and select Slice > To Objects.

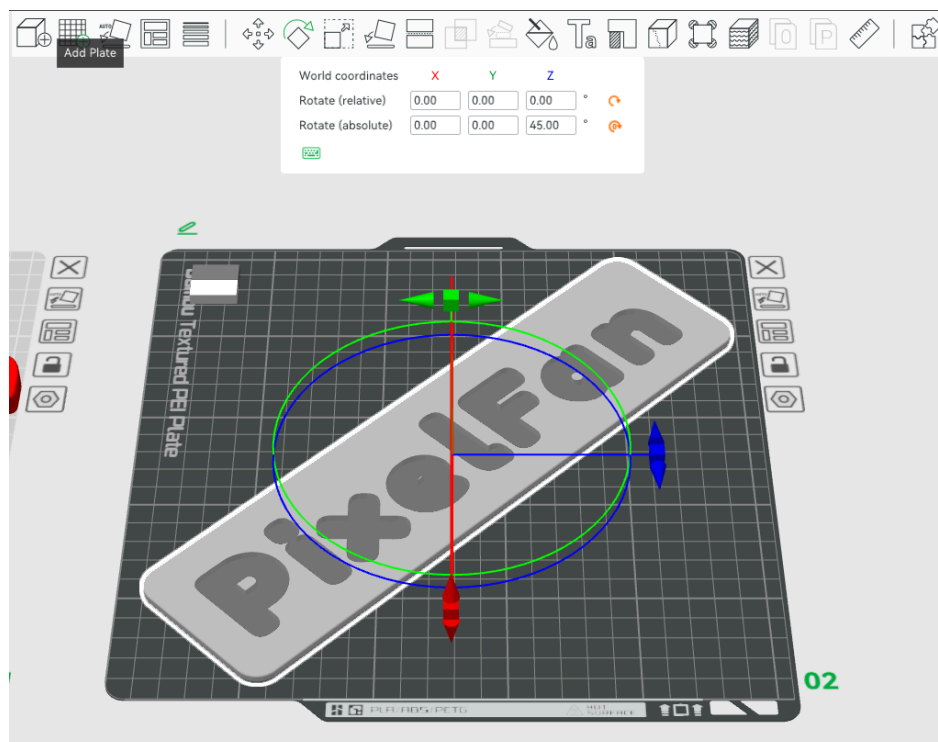


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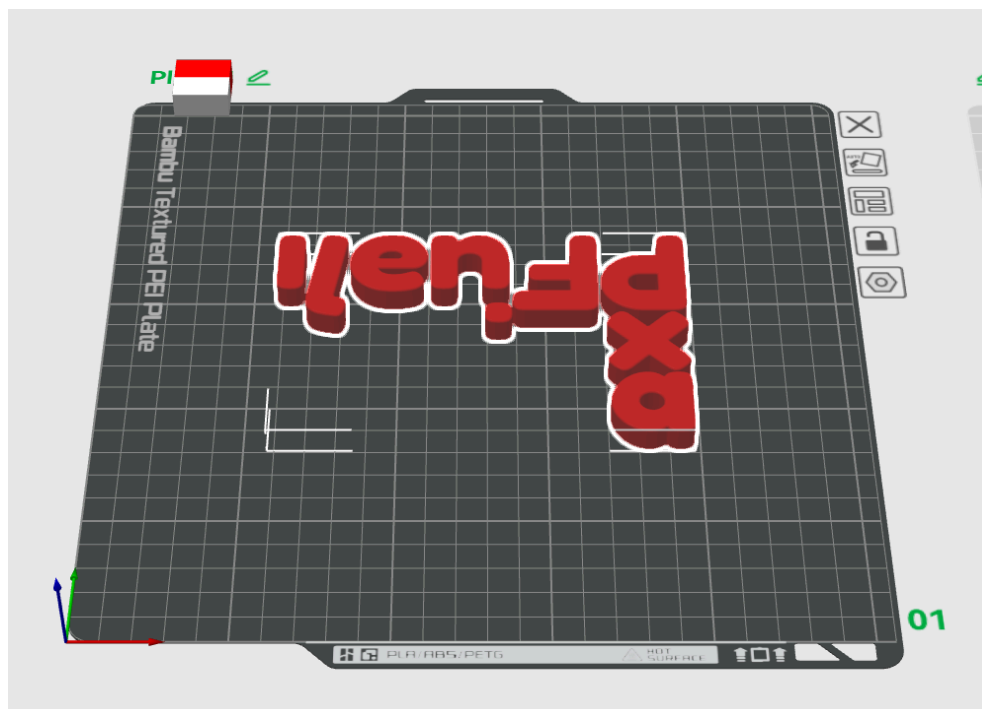
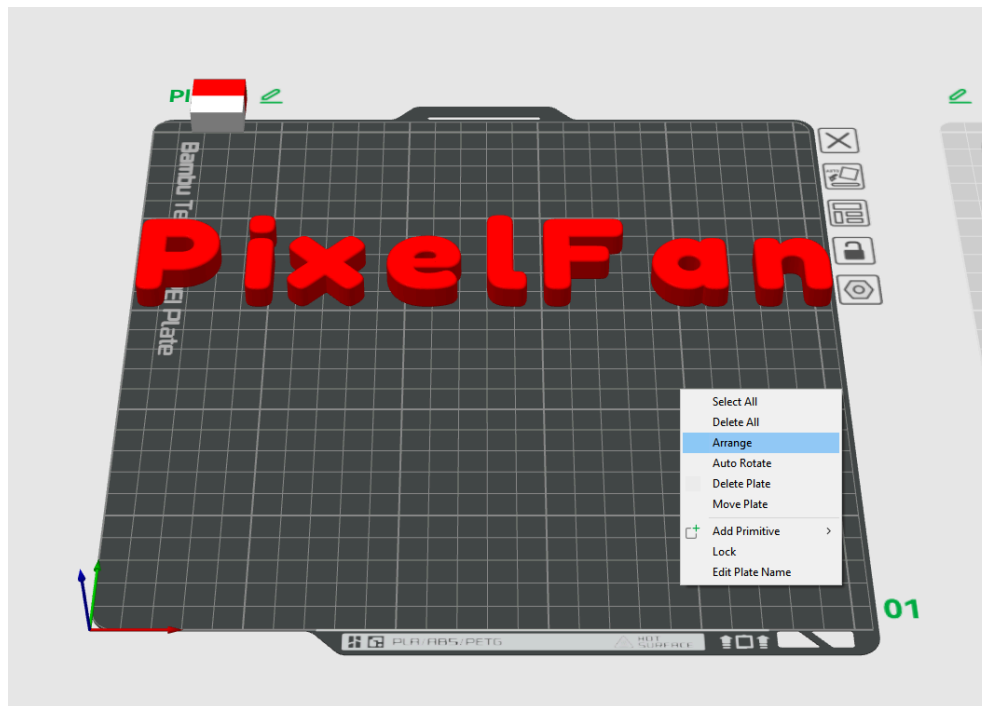
9. You will now be able to move the base plate to a new build plate.



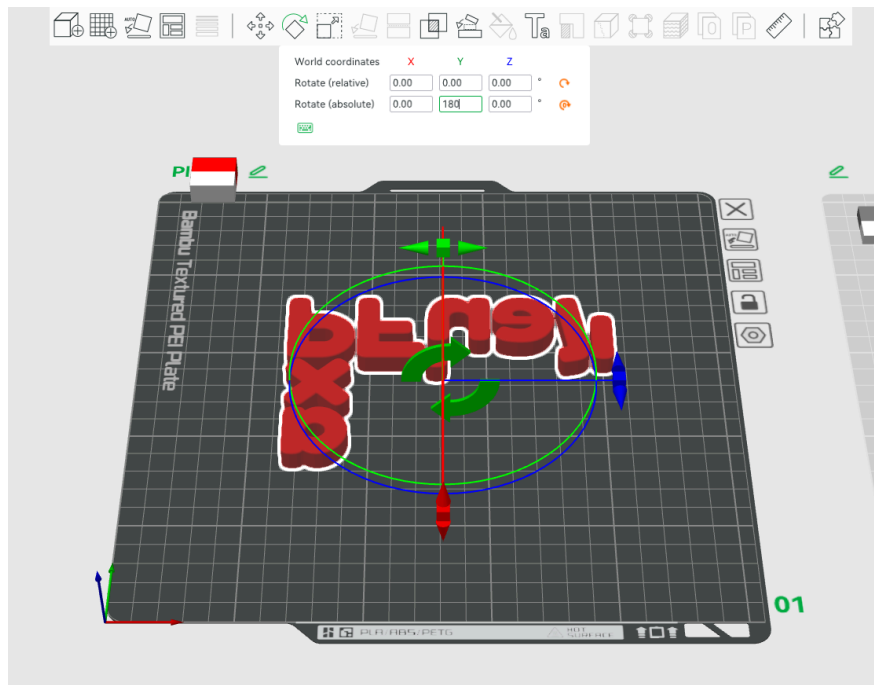
10. If the plate is too wide for the build plate, you can use the rotate tool and rotate by 45deg on the z axis.



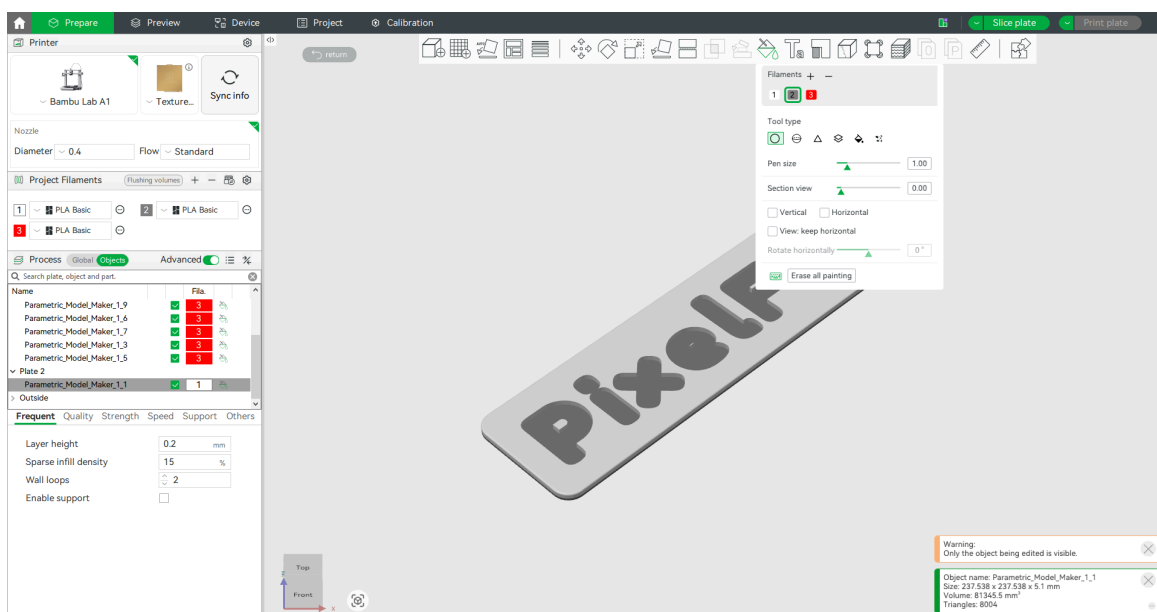
11. To optimize the placement of the letter for fastest printing right click on the plate and select "Arrange".



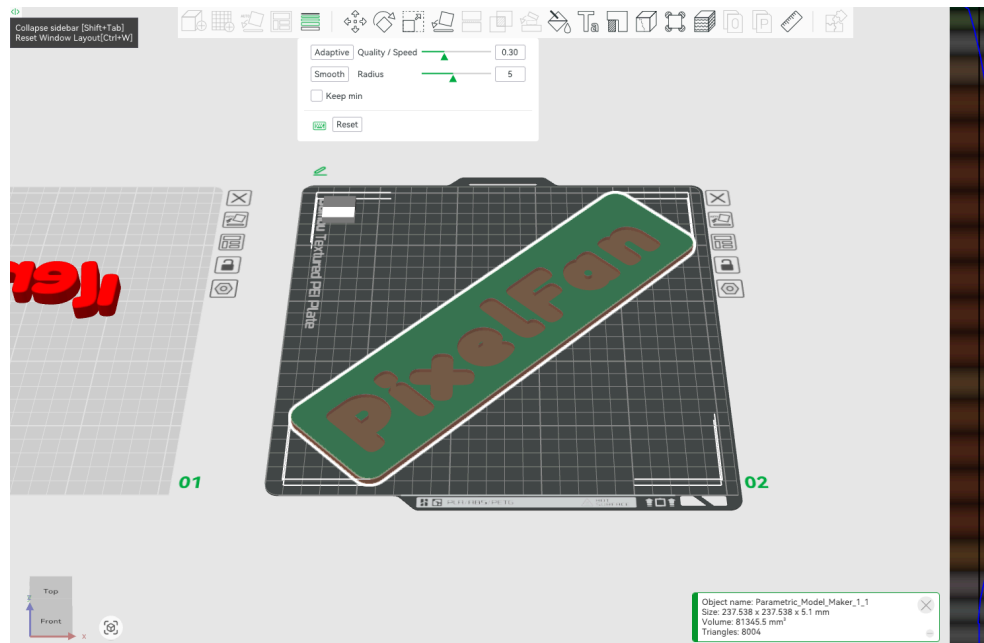
12. **Recommendation:** I like to have the texture of the build plate on the top of the letters so I rotate the letters on the y axis by 180deg to flip them over.



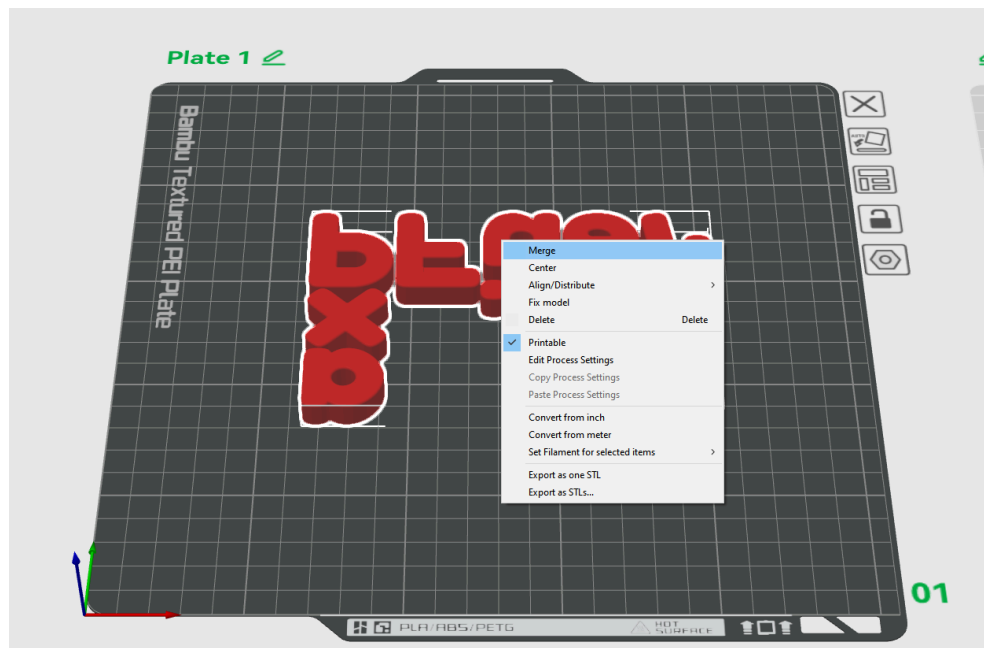
13. Now is a good time to change the filament color for the various parts. Since the 2 base plate pieces are attached, you will need to use the paint tool.



14. To get nice 1mm fillets use the variable layer tool to decrease the layer size on the top and bottom. I like to do Adaptive at 0.4.

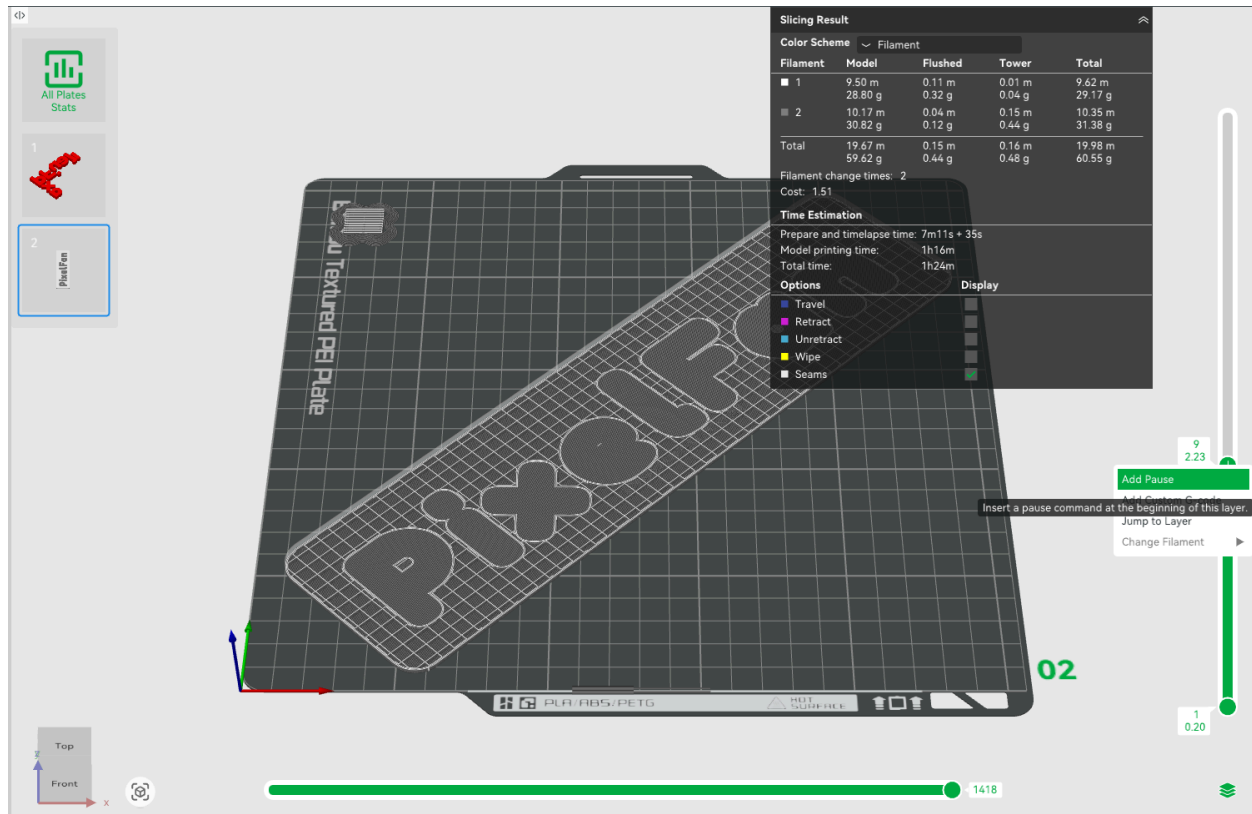


15. To avoid having to apply this to each one of the letter individually, you can select them all and merge before applying.

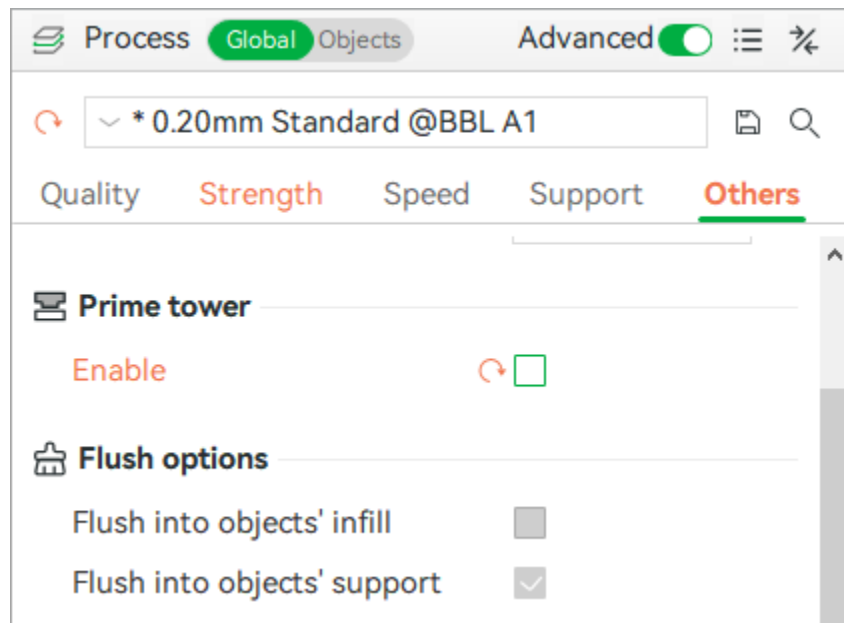


16. Slice the model.

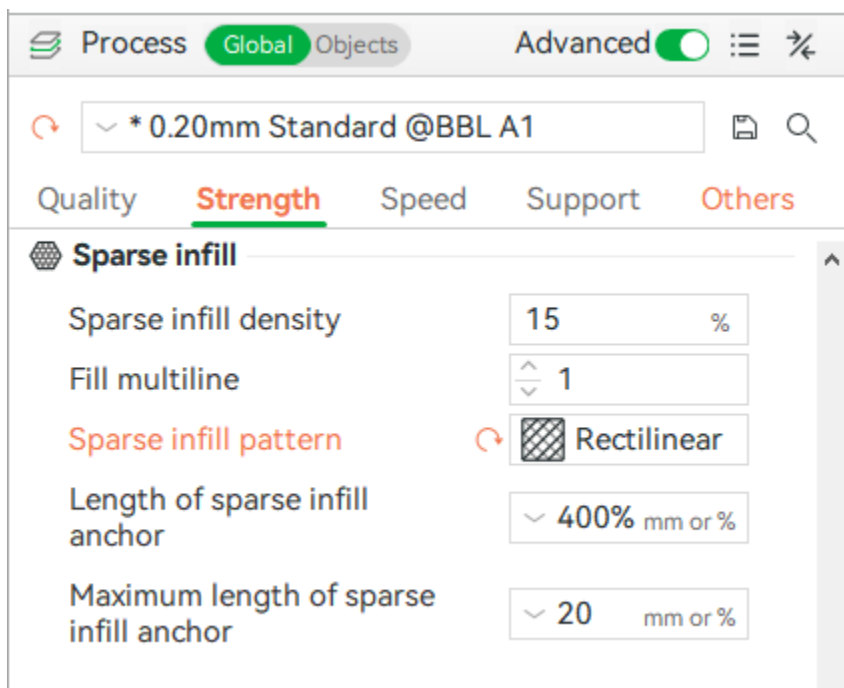
17. **Recommendation:** If you are printing without an AMS but would still like the 2 color base plate, go to the "Preview" tab and use the green "+" dot on the top right to slide down to the first layer that you see the second color. (The layer number may be different depending on the variable layer settings). Right click on the green "+" dot and select "Add Pause". This will pause the printer so you can do a manual filament change. (#GoTeamNoAMS)



18. **Recommendation:** Disable the Prime Tower if not using AMS.



19. **Recommendation:** For faster print times I set Sparse Infill Pattern to Rectilinear.



20. Print your design!