Cassette Tape Fixture

Assembly / Installation Guide
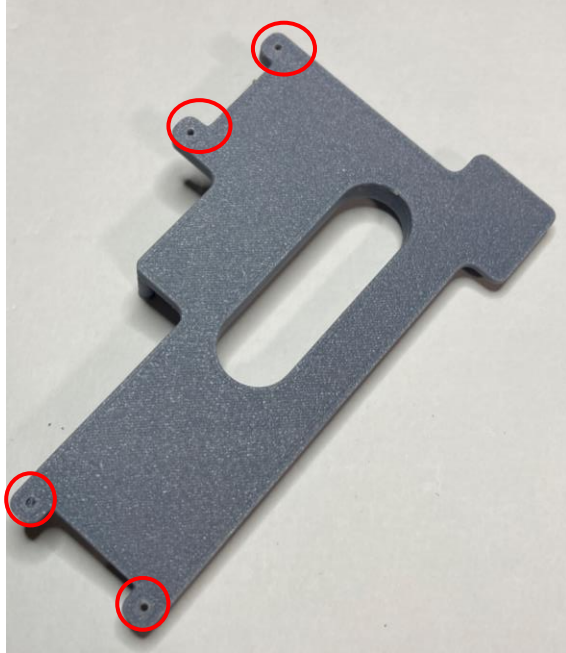
By: Geoffrey Gao
02/2024

Bill of Materials
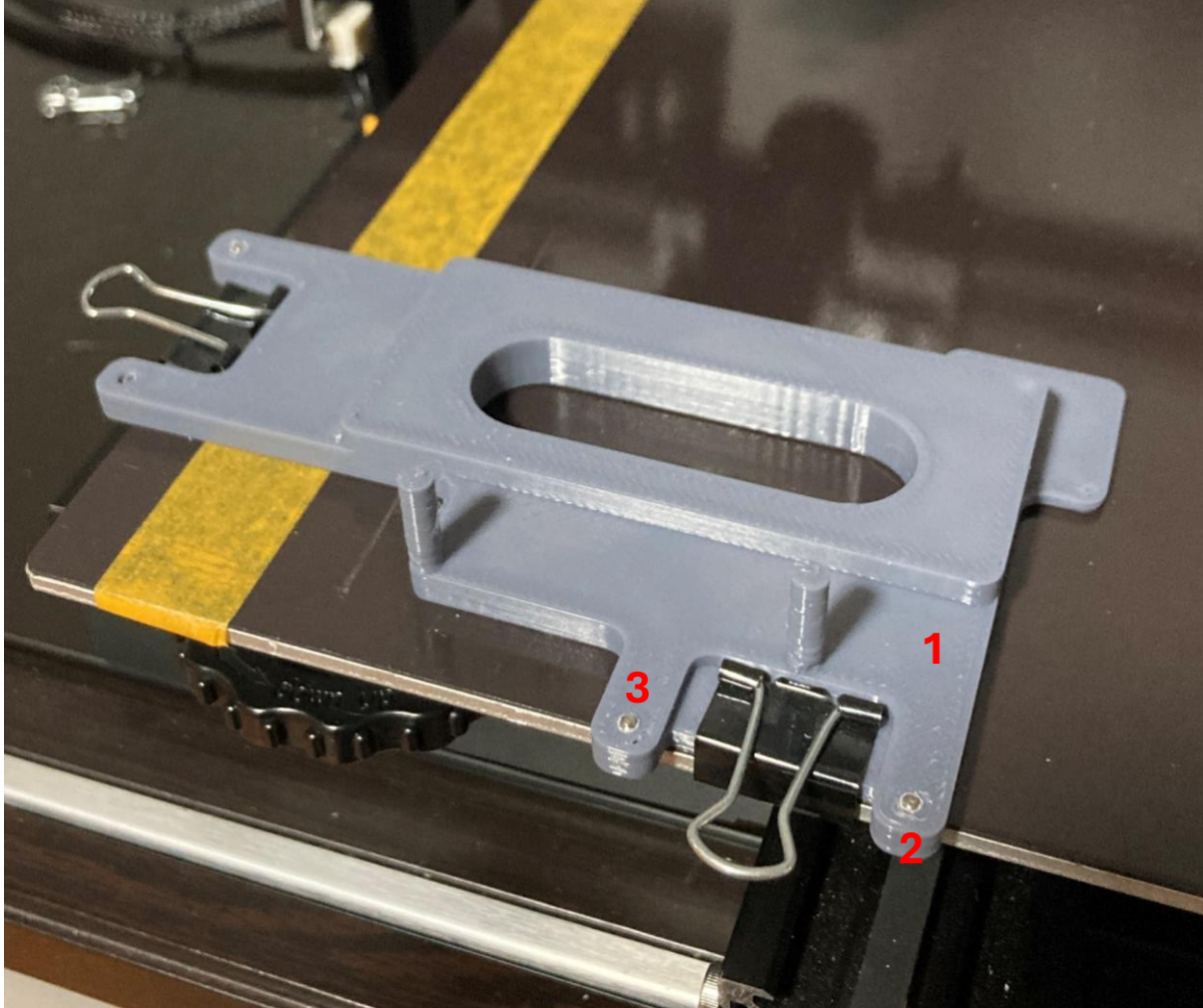
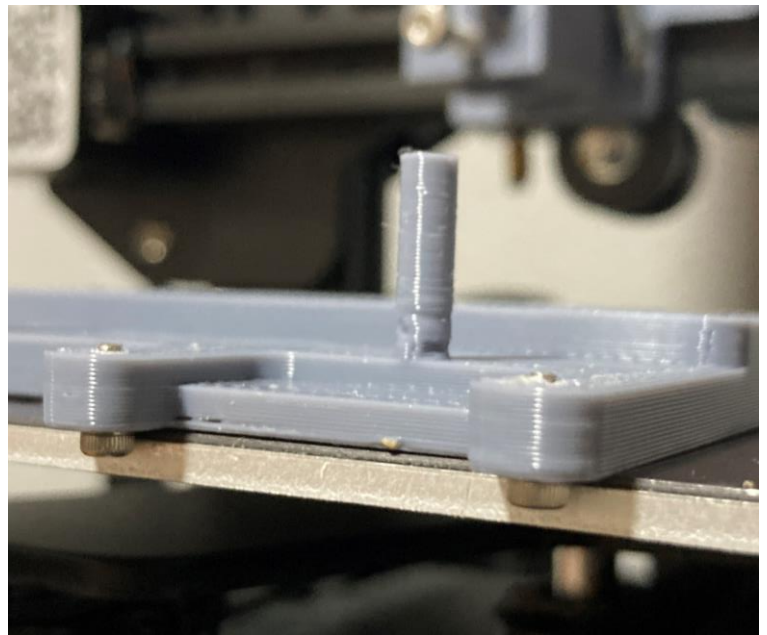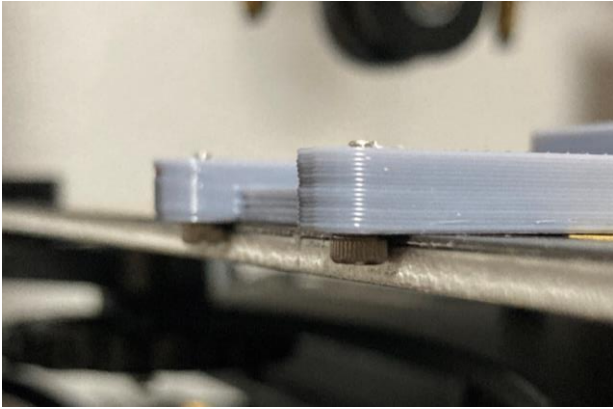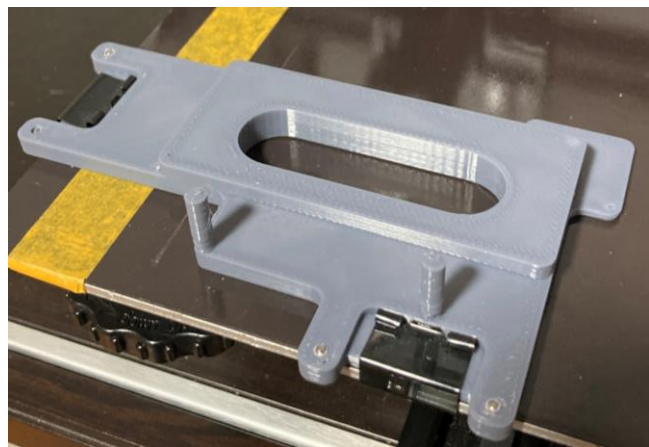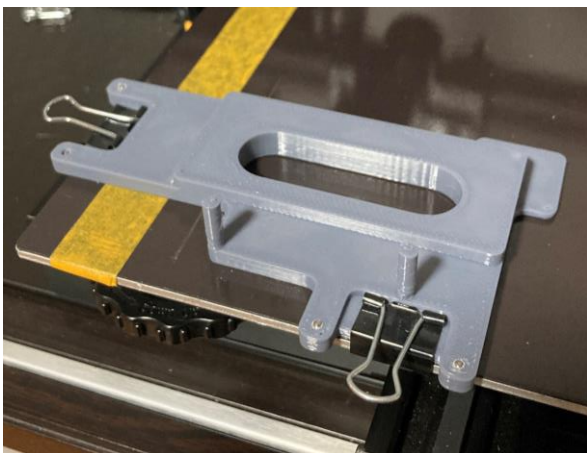| #	Name	QTY
1	Base, Cassette Fixture	1
2	Socket Head cap Screw (M2 x 6mm)	4
3	Small Binder Clips	2

Assembly Instructions
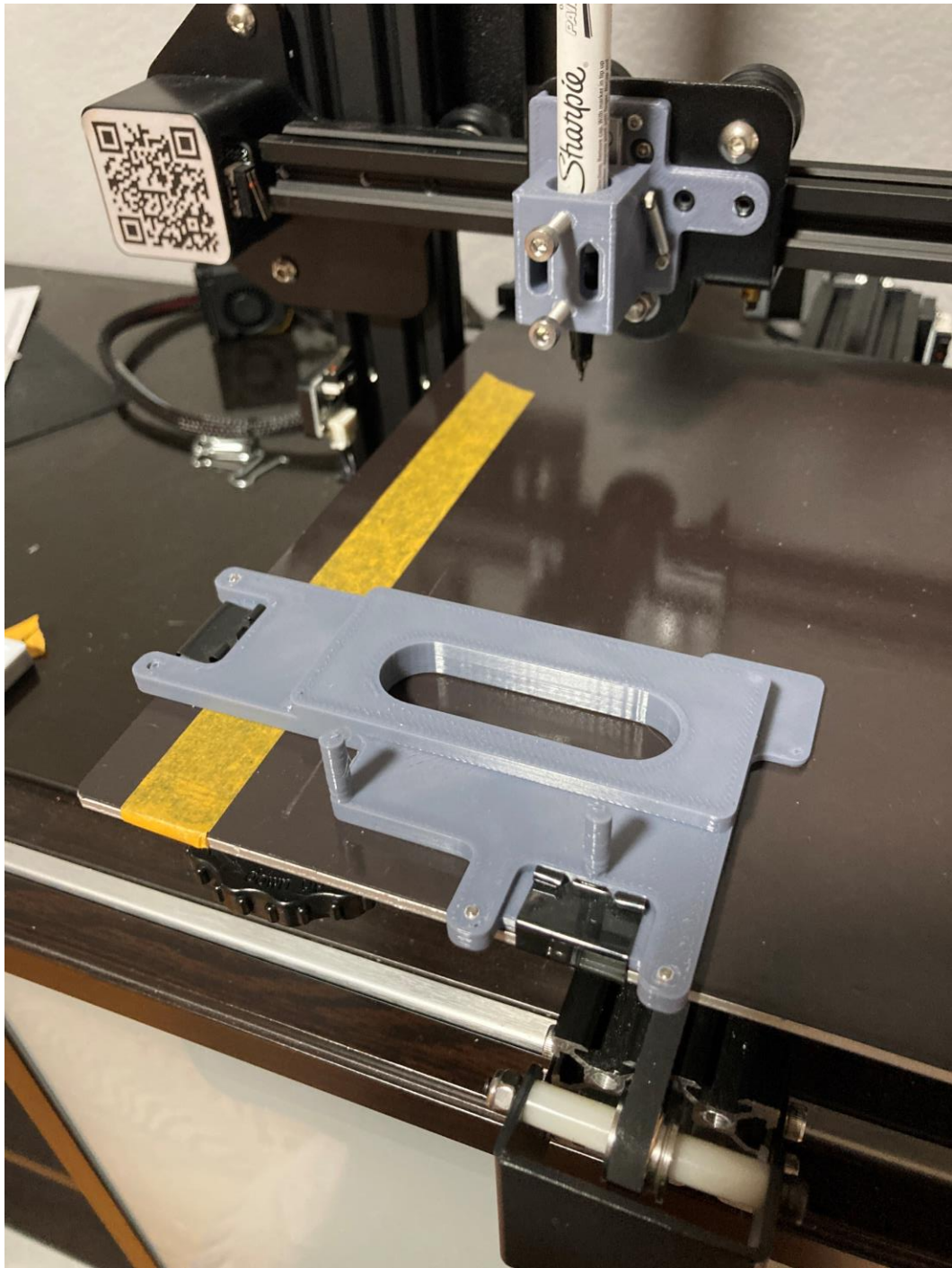

1. Tap the noted holes with an M2 Tap.

2. Install M2 x 6mm Screws in the holes that were just tapped from the bottom

3. Remove the FEP sheet from the base plate. Align the fixture against the base plate by pushing the installed screws against the plate.

4. Secure the fixture to the plate with binder clips. Then remove the binder clip handles to prevent collisions

Installation is complete!
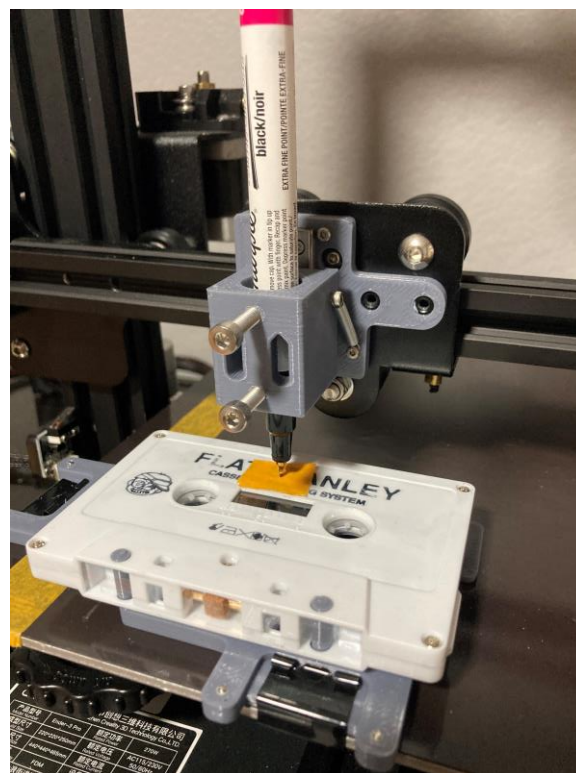
Setup Instructions

1. Auto home the system and Move Z to +15mm

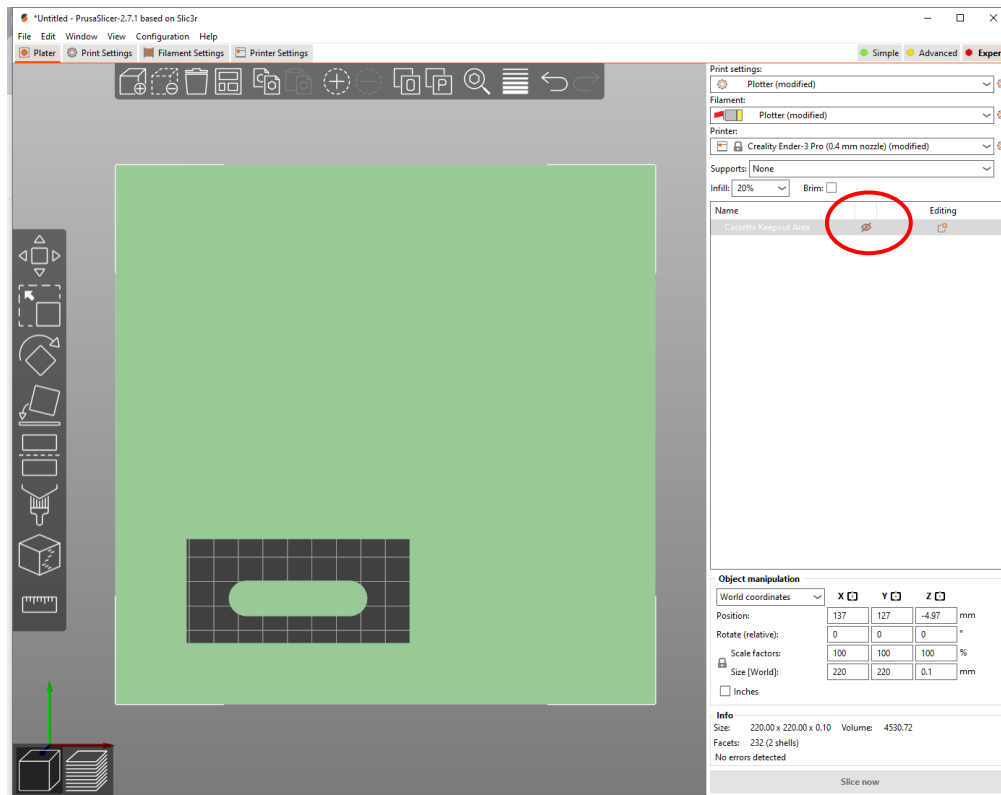2. Select "Set Home Offsets" to set the Z 0 position to the current position

3. Move Z up +0.5mm, then Disable Steppers

4. Install the pen as you would normally, ensuring contact of the pen against the surface when tightening. Then, auto home. You are now ready to print!

Gcode Generation

1. Load the *"Cassette Keepout Area.svg" file*

Center the file to the print bed, and click the eye icon on the right to ensure it doesn't get included in the G Code. This is for reference only.
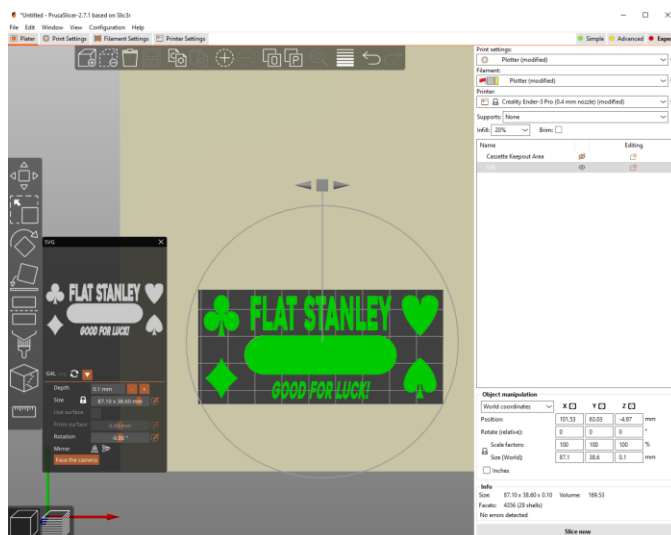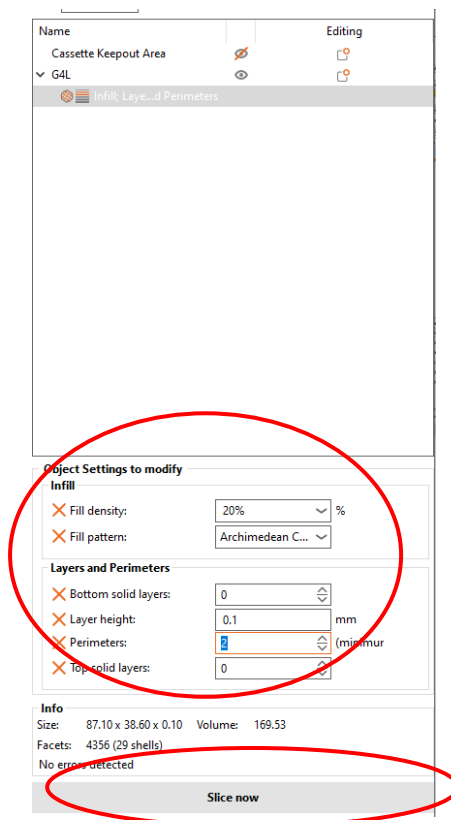

2. Load your design and position it according to the keepout area. Ensure the thickness is set to 0.1mm

Use "Cassette Design Template" for designing to fit in the correct space.
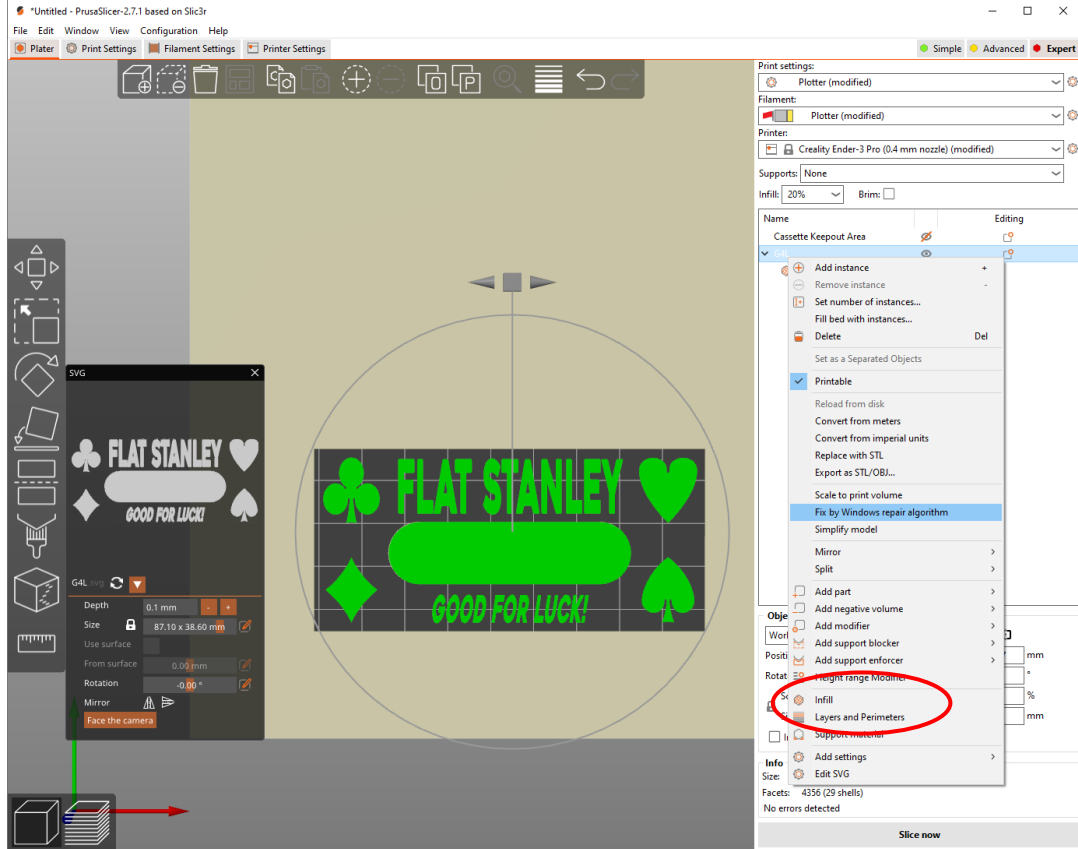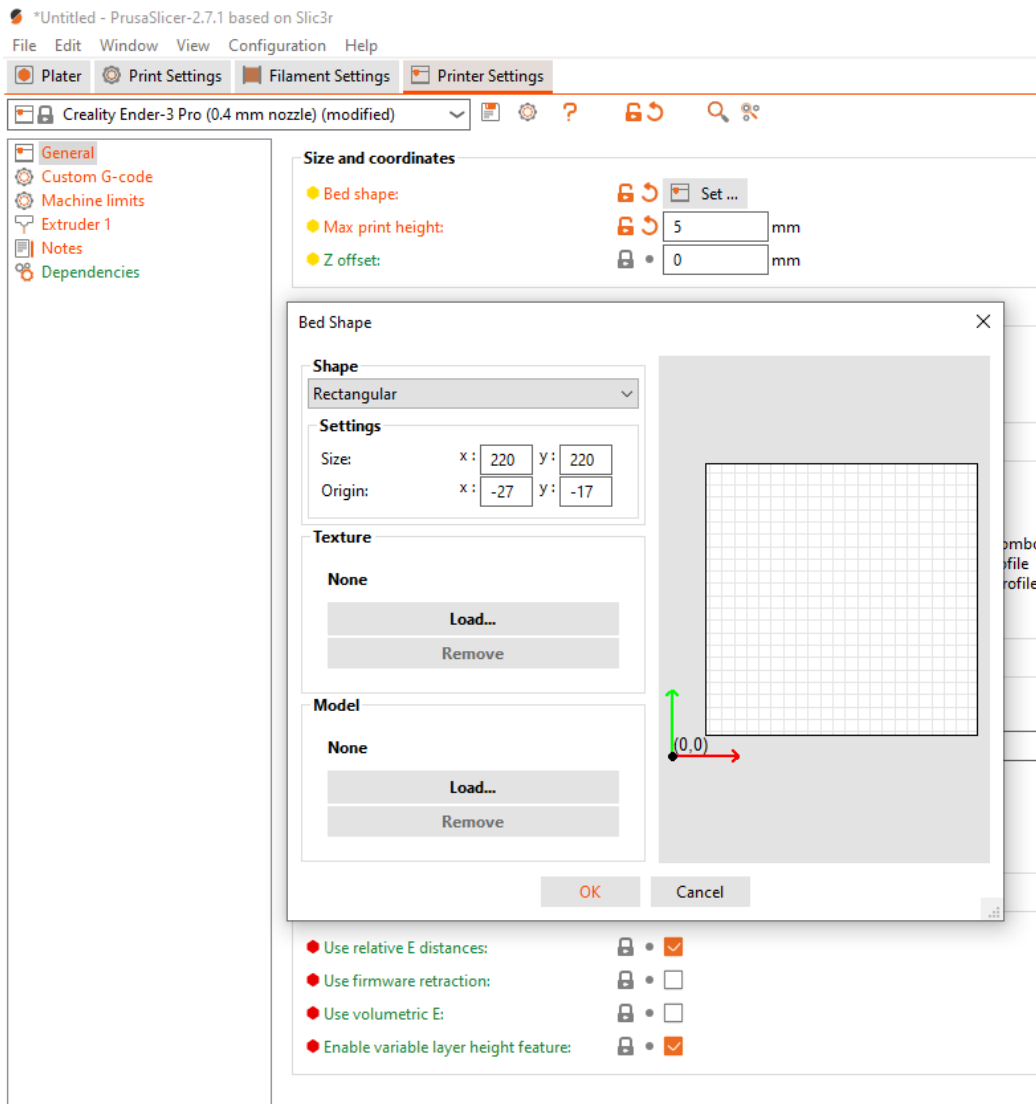
3. To modify print settings, select "Infill" and "Layers and Perimeters"

Start with these values and adjust accordingly. Ensure that the config settings have been loaded already

4. Adjust print settings to your liking, then your design is ready to print!

Troubleshooting:

If you are noticing that the print is not aligned to the intended coordinates, you may have to adjust the XY offset in Prusaslicer
- In PrusaSlicer , Printer Settings, Bed Shape, and adjust the Origin XY values
- These values are related to the size of the pen being used, so adjust accordingly