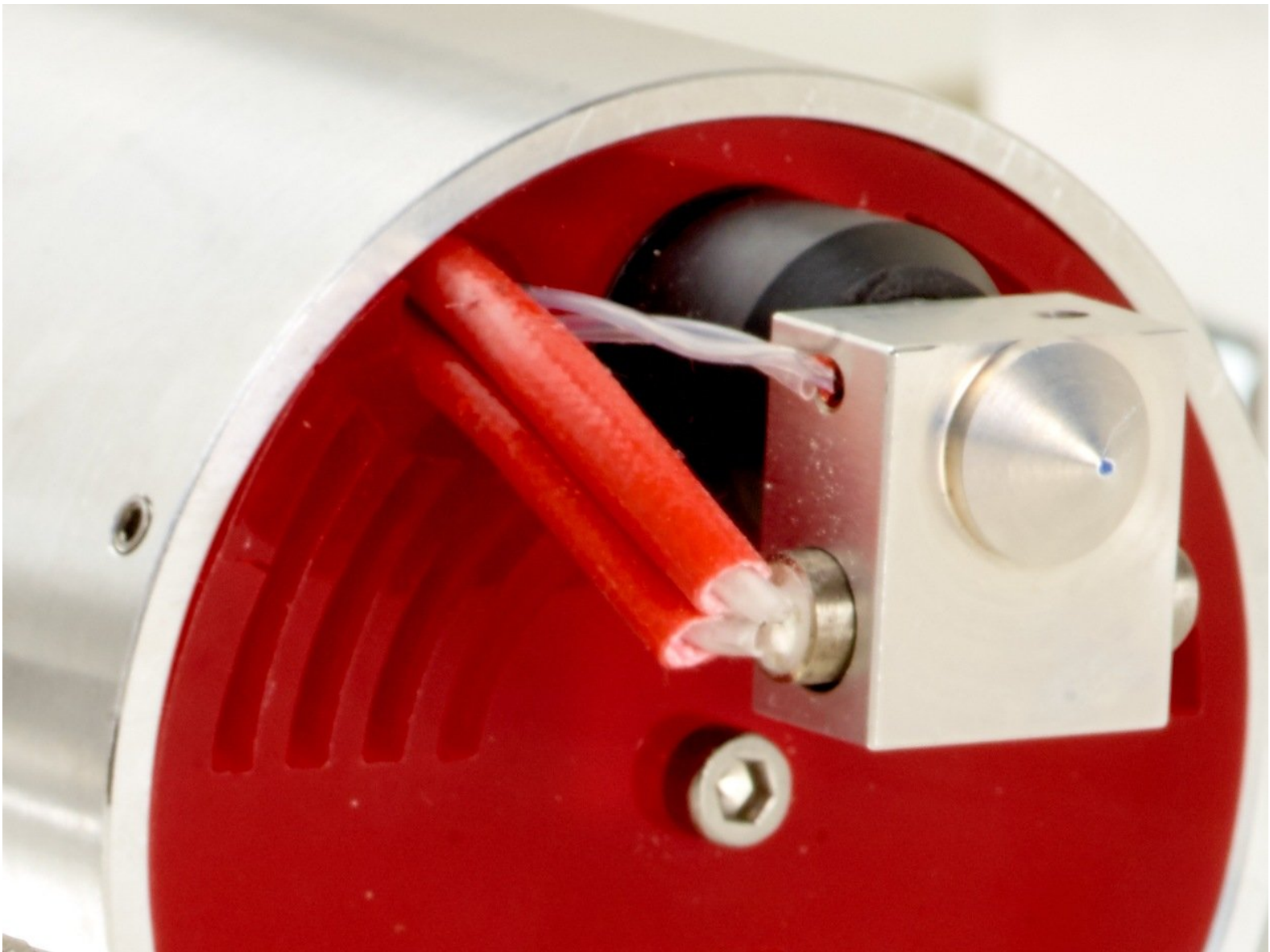




Print Adhesion Guide

This guide will cover some of the topics for getting better adhesion on the first layers printed as well as layer to layer

Written By: BoXZY

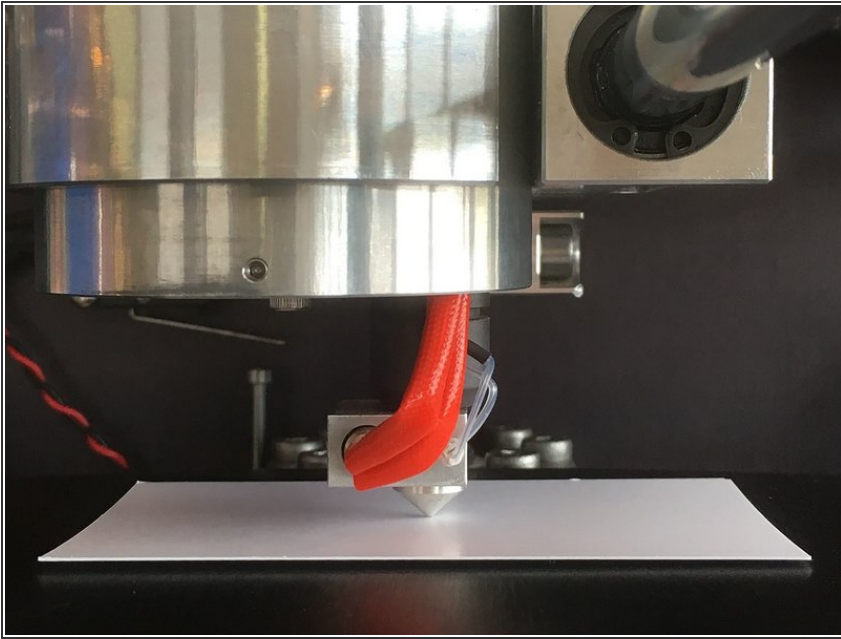


Step 1 — Introduction to Print Adhesion



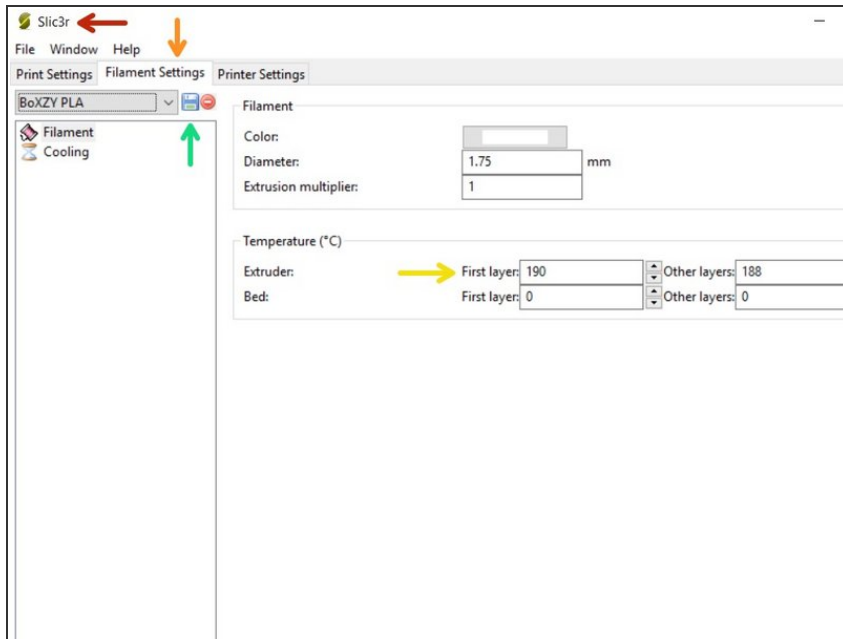
- 3D Printing depends upon layer adhesion and adhesion to the platform that the object is being printed onto
- BoXZY comes with stock settings that will work well for the majority of 3D Printable Objects out there
 - The stock settings are great for beginners however not all 3D Objects will print with the same quality from the same settings
- 3D Printing will require fine tuning and trial and error in testing each specific 3D Object and the quality of the print that is desired

Step 2 — Print Adhesion: Part I



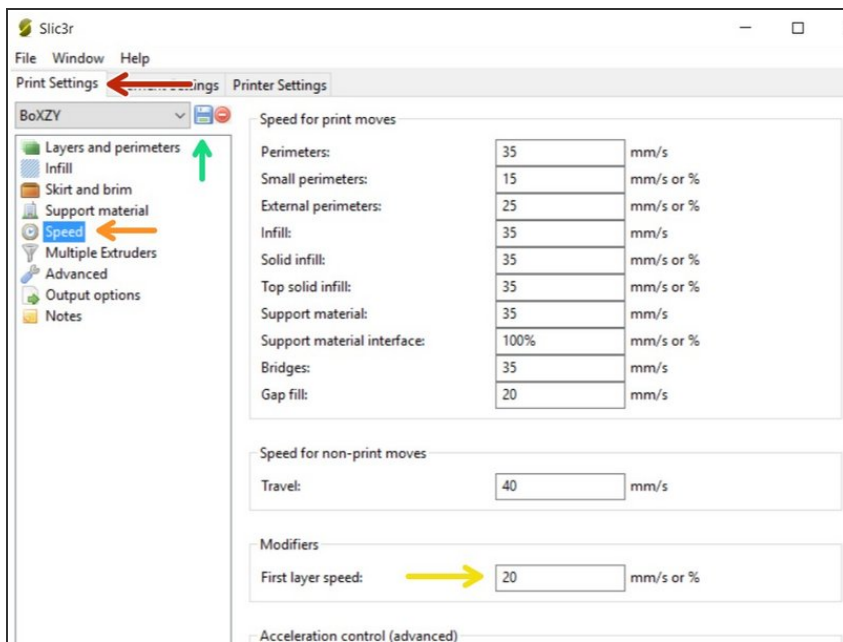
- **Prints are not sticking to the Platform**
 - The Nozzle Height is too high off of the Platform and plastic is extruding but not sticking to the Platform
 - ☑ The opposite is true as well. The Nozzle Height might be too close to the Platform and not applying enough Plastic to adhere
- **Reset your Nozzle Height** and try printing again
 - Setting the Nozzle Height means inserting a business card underneath your 3D Printing Nozzle and locking the attachment in place
 - **Do Not** set the Nozzle Height directly on the Platform
 - **Pull** the business card out from under the Nozzle
- For a video guide showing how to set and check your nozzle height click [here](#).

Step 3 — Print Adhesion: Part II



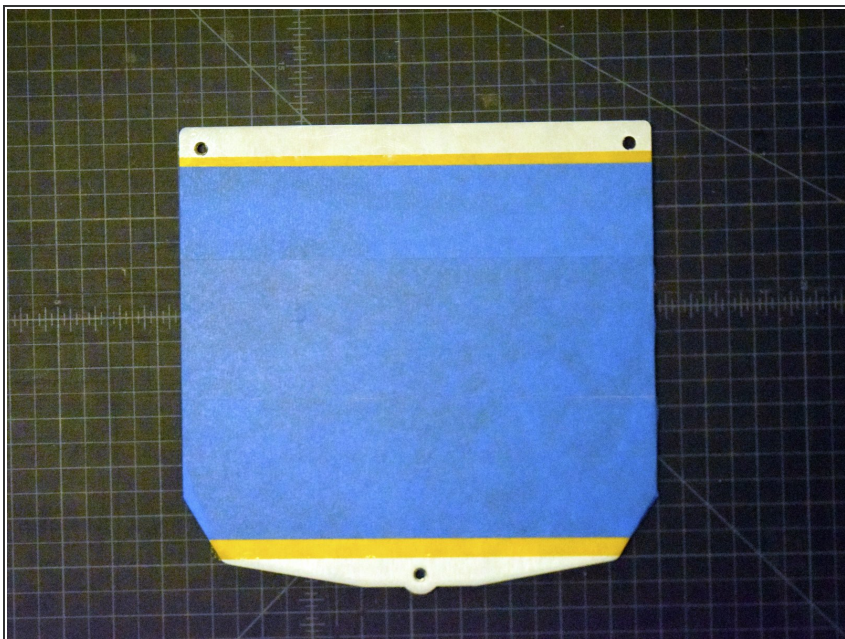
- **Prints are not sticking to the Platform**
 - Your first layer temperature might not be hot enough to stick to the platform
 - In your *BoXZY Interface* go to the *Slicer Tab* and select the **Configuration** button for **Slic3r**
 - **Select Filament Settings**
 - In your *First layer Extruder Temperature* setting input a *higher* temperature than the stock **190 degree** setting (try 195)
 - **Do Not** set the *First Layer Temperature* above **220 degrees**
 - **Select** the **Save** and then *re-slice your 3D Object* and trying printing again

Step 4 — Print Adhesion: Part III



- **Prints are not sticking to the Platform**
 - If you are seeing gaps or holes in the first layers of your print you may be moving too quickly for the plastic to grip onto the Platform and other layers
- **Slow down your first layer speed** and try printing the part again
 - In the **Slic3r Configuration** select **Print Settings**
 - **Select Speed**
 - **Change First Layer Speed** to a value **slower** than the Stock 20 mm/s
 - **Save** the *configuration change* and **re-slice** your 3D Object
- Try to print the object again

Step 5 — Print Adhesion: Part IV



- **Prints are not sticking to the platform**

i Print Adhesion to the Platform is typically done on a medium such as tape or heated Glass. Each material composition will react differently and you will have to adjust how you print

- Beginners should use tan masking tape before using other tape. For some other options, check out [this step](#) in the 3D Printing with BoXZY manual.

- To get the best results with it painters tape, lightly sand it with 80 grit sandpaper to rough the surface. Then wipe it down with Windex and let it dry before printing

- You can also use masking tape or [Kapton Tape](#) as a printing surface. [BuildTak](#) is one option made specifically for this purpose.