

Successful First Layer Perfect First Layer

The first layer of 3D printing is the most important aspect to ensuring a successful end print. We want to make sure that the PLA is adhered onto the print surface properly and have no gaps between the lines.



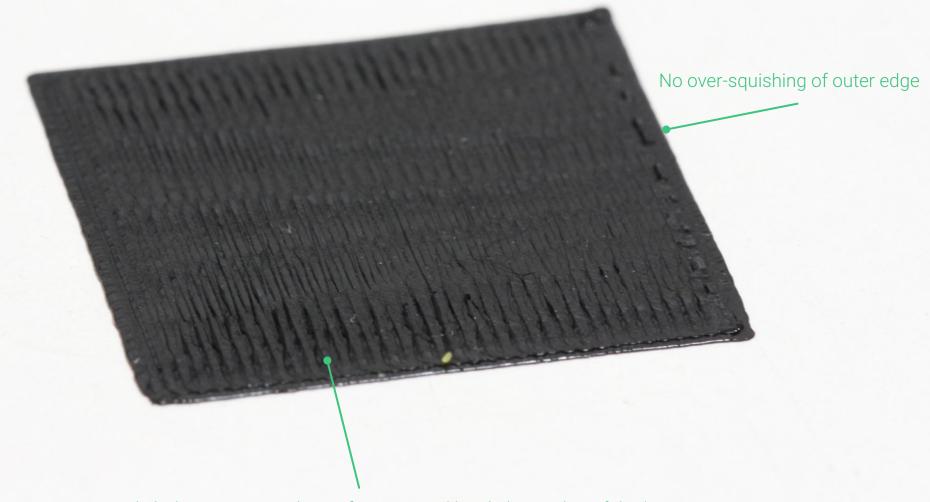
No over squishing of outer edge





Successful First Layer Slightly Over-Squished

It is okay to cautiously over-squish a print to ensure it is properly adhered to the print surface. When in doubt, slightly over-squish. It may make it slightly harder to remove the print, but it is better than having it pop off in the middle of printing.



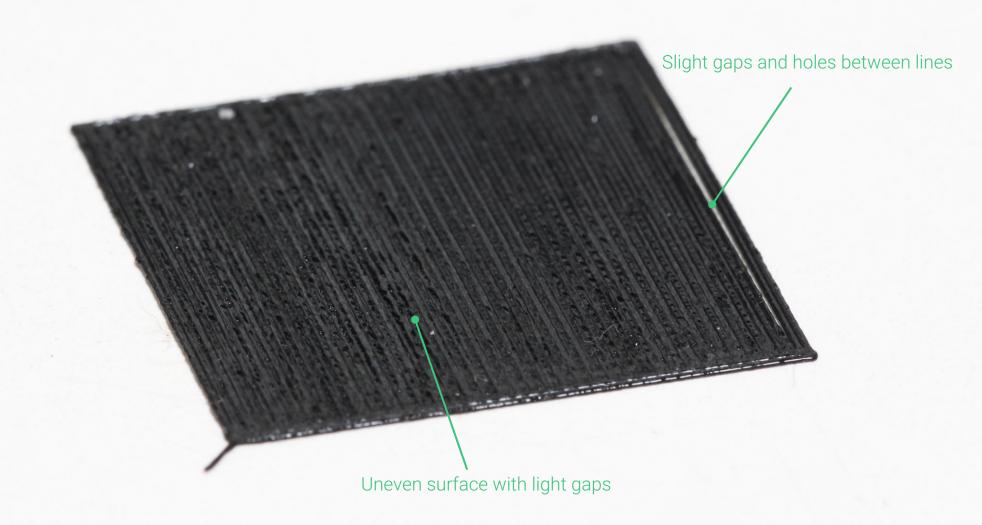
Slight bumpiness to the surface, caused by slight overlap of the lines





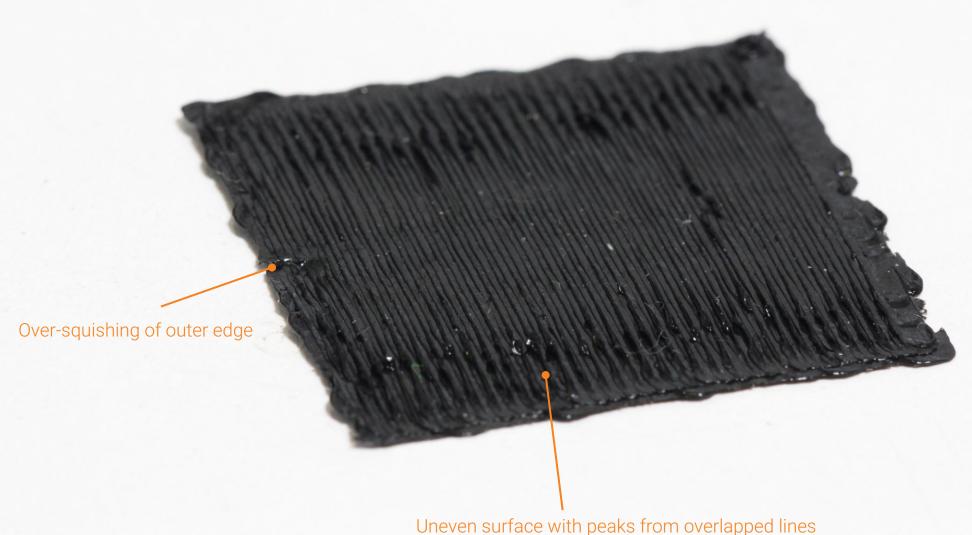
Successful First Layer Slightly Under-Squished

Slightly under-squished first layers are generally okay. It may make the first layers slightly more rough or the edges curl easier. The most important thing to know about slightly under-squished first layers is that it increases the chance of parts dislodging from the print surface during the print.



Failed First Layer Nozzle Too Close To Bed

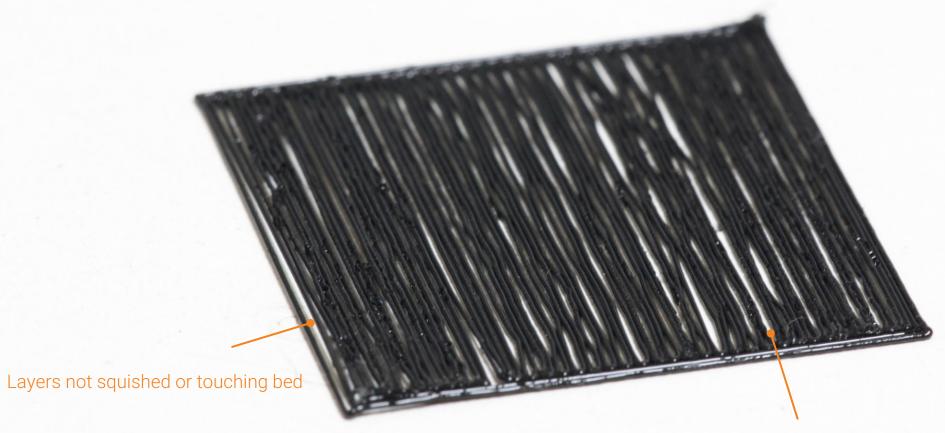
Nozzles too close to the print surface causes extreme over-squished first layer. It makes the part hard to remove. It could also cause the filament to stop flowing and cause issues with the print head of the 3D printer.





Failed First Layer Nozzle Too Far From Bed

Nozzles that are too far from the print surface will not have proper adhesion, causing the print to fail almost immediately. Either it will dislodge instantly or dislodge shortly after, and ball up around the print head. **Stop the print right away if you see this**, as letting this first layer go may cause damages to the print head and other components.



Large uneven gaps between the lines