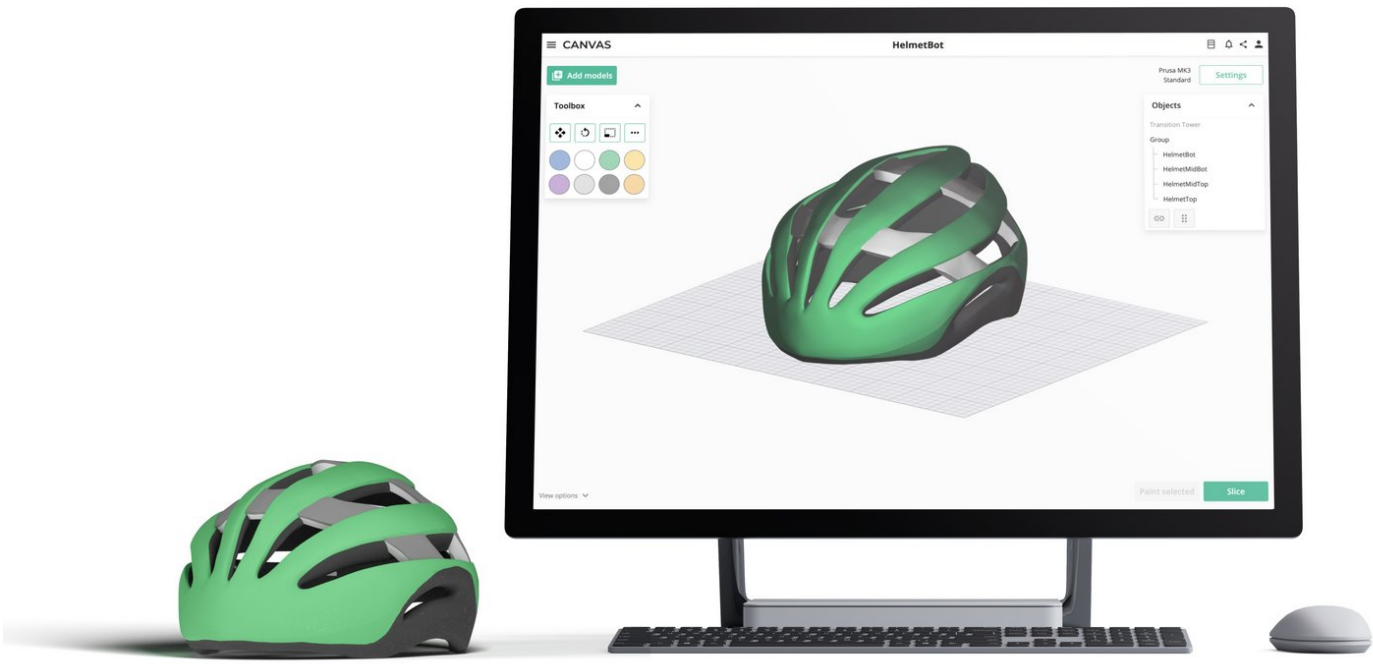
Discover Canvas

Get started with multi-material features in Canvas.

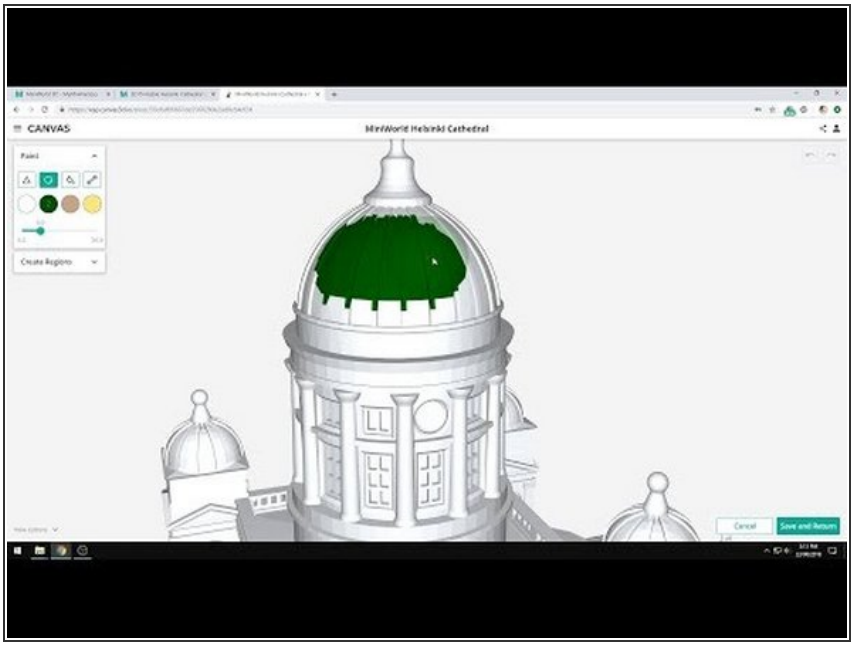
Written By: Mosaic Support



INTRODUCTION

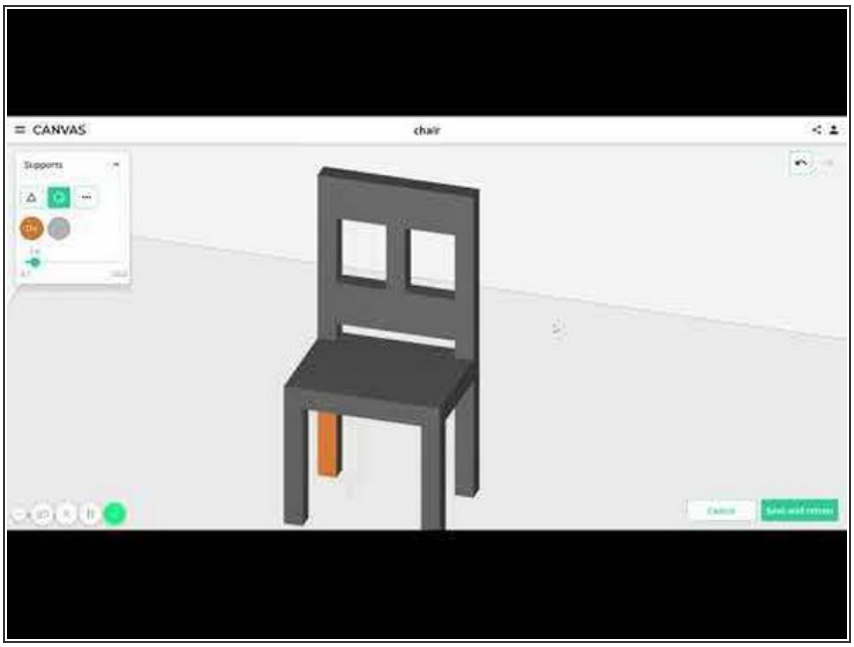
This article provides an overview of the features you can use in Canvas for Palette printing and more.

Step 1 — Model Customization: Painting and Stamping



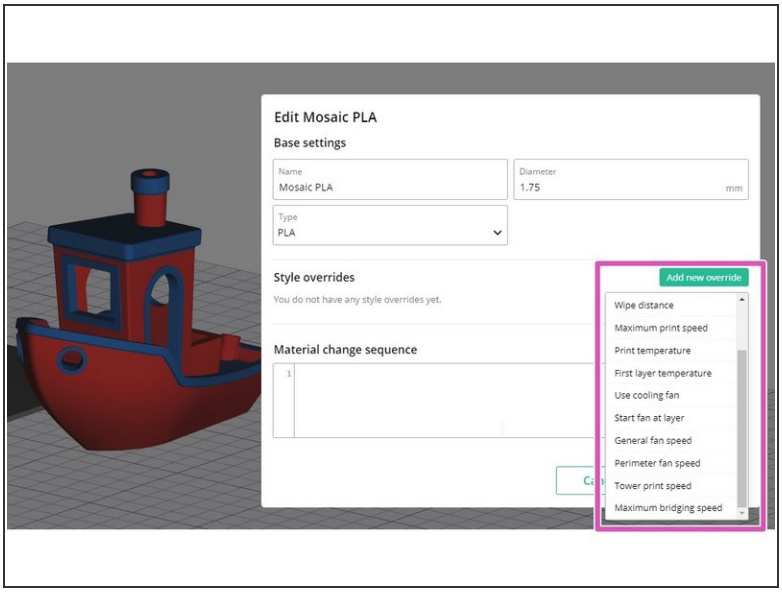
- Transform models for multi-material printing by painting them in Canvas. This is best with models that are single-body or comprised of one model.
- **Painting allows for colored regions to be created directly on the model.**
- Painting will not separate the model into multiple STLs, but the painted regions will be recognized as regions for color transitioning after slicing.
- **Stamping allows for images to be placed on the model. Check out these tips on how to get better stamps onto models.**
- Stamping behaves like an image on a light projector against an object. The stamp is best placed on flat faces of the model, and will "wrap" around the geometry. Multiple stamps can be used on a model.
- **Painting and stamping are available when you select an ungrouped model, and click Paint Selected.**

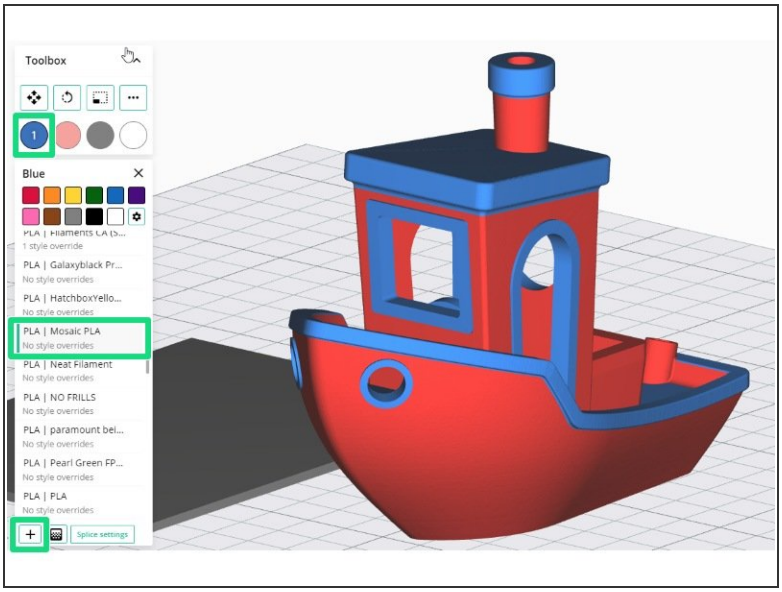
Step 2 — Custom Supports



- **Custom supports allows for support placement to be selected and placed manually, minimizing surface defects.**
- Adding custom supports is similar to painting, where regions and polygons on the model can be selected. Supports will generate directly below the painted region towards the bed.
- **Custom supports are available under *Project Settings > Supports > Support Method: Custom > Configure Custom Supports***

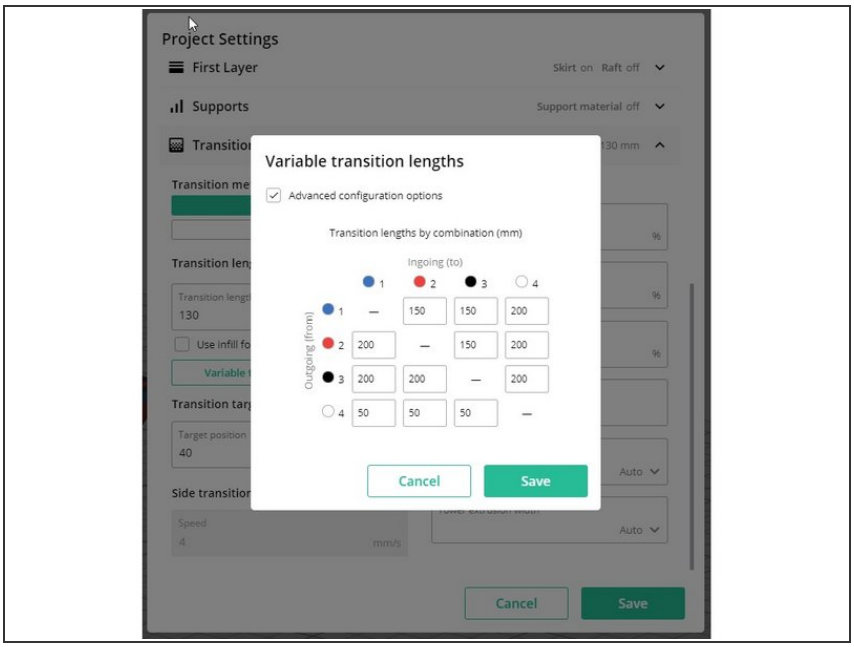
Step 3 — Material Profiles and Settings





- **Create [custom material profiles] that can be selected for each input drive on Palette.**
- [Style overrides] allows certain settings to be used when that material profile is selected by a drive.
- Having custom material profiles allows for each filament brand or different finishes to have its own settings.
- **Manage material profiles from the main menu, or *Open Project > Select Tool/Color > Select or Add New Material.***

Step 4 — Variable Transition Lengths

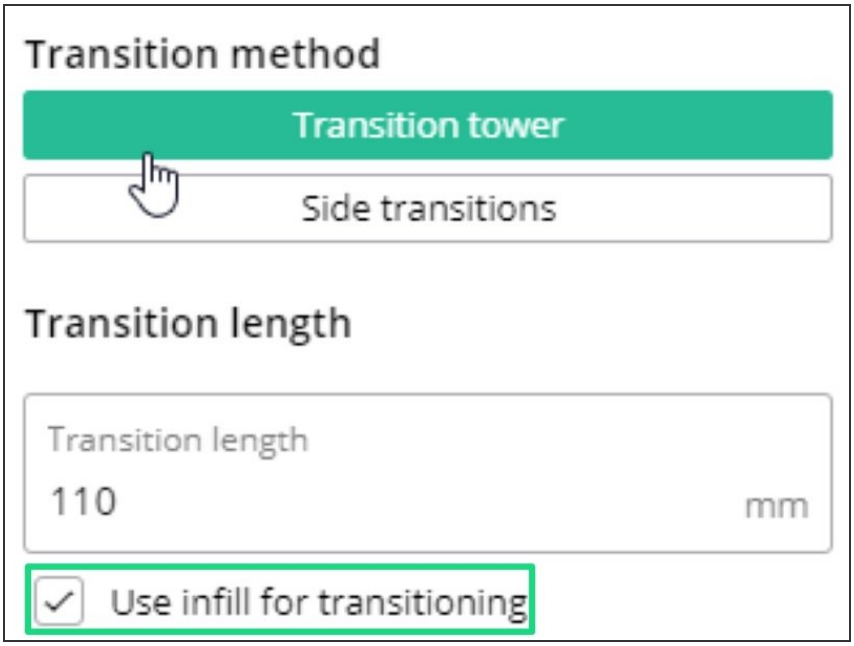


- **Variable transition lengths allows for purge lengths to be specified between drives and colors used, assisting with reducing color bleed during printing.**
- Use variable transitioning to purge more for strong colors such as black and red, and reduce the purge amount when transitioning from light colors.
- **Variable transitioning is available when you *open a project > Project Settings > Transition > Variable Transitions.***

Step 5 — Side Transitions

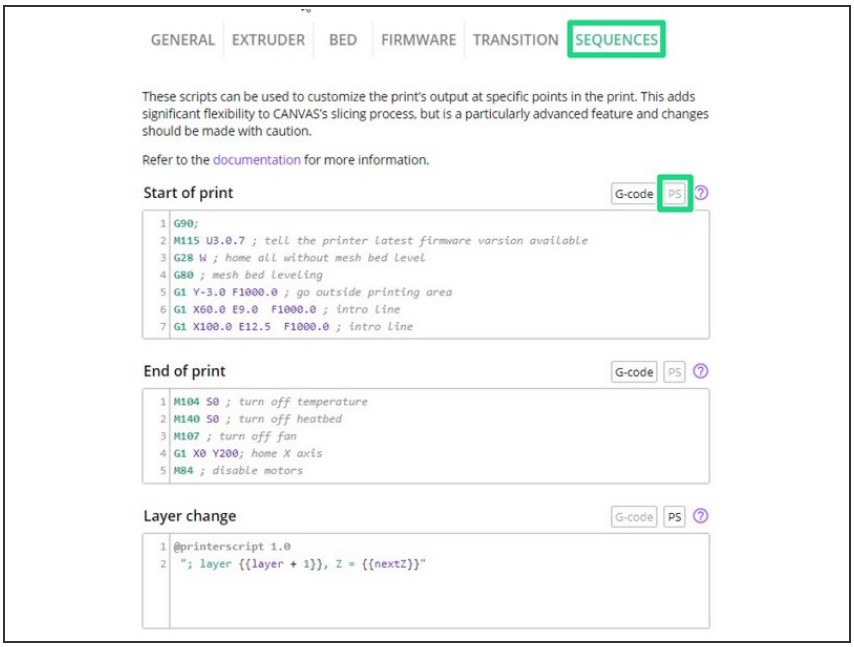
- **Side transitioning allows material to be purged off the bed or on a specified coordinate. This method of color transitioning can help reduce print time and waste.**
- Side transitioning is compatible with BigBrain3D when using Palette in connected mode.
- **Side transitioning firmware settings (purge location) are available when you edit a printer profile. Transition and purge amount settings are available under *Project Settings > Transition > Side transition.***

Step 6 — Infill Transitions



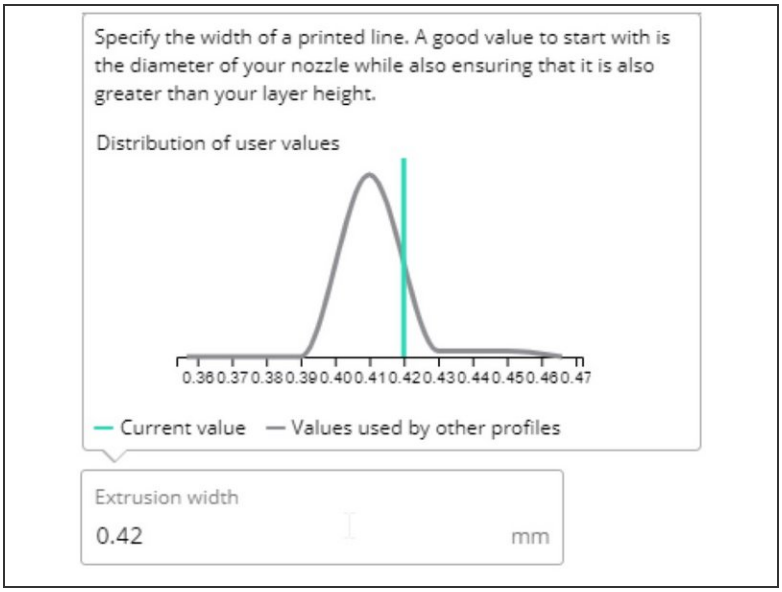
- **Infill transitioning uses available infill as part of the transition allowing you to reduce the tower size, overall waste, and print time.**
- Canvas will attempt to use the most recent part of the infill as part of the transition sequence.
- This method is not recommended if soluble supports are used in the print.
- **This is available under *Project Settings > Transition > Use infill for transitioning***

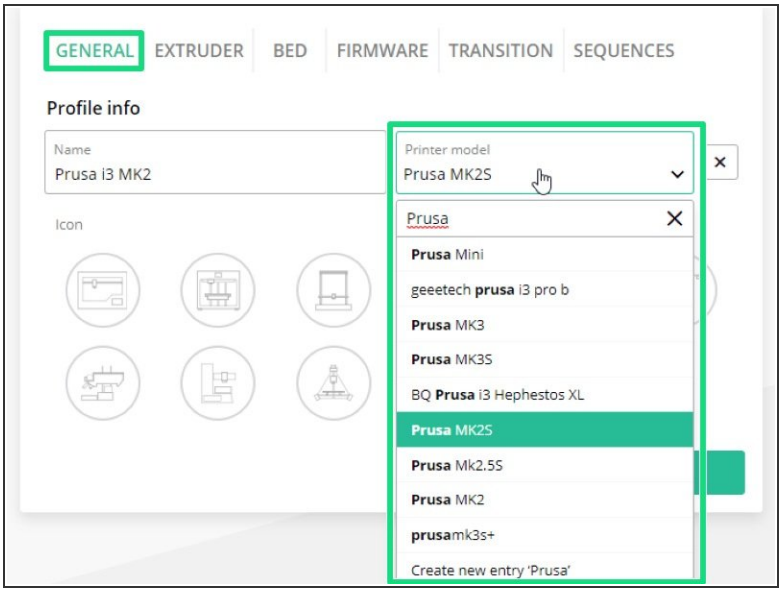
Step 7 — PrinterScript for Custom Sequences



- **PrinterScript allows for advanced sequencing in starting scripts, ending scripts, side transitions, layer changes and material changes.**
- Here's a tutorial on how PrinterScript can be used to add a pause when a layer is reached, in order to do a filament change. This expands the number of colors used in the print.
- **This is available under *Printer Profiles > Select/Edit Printer Profile > Edit Printer > Sequences.***

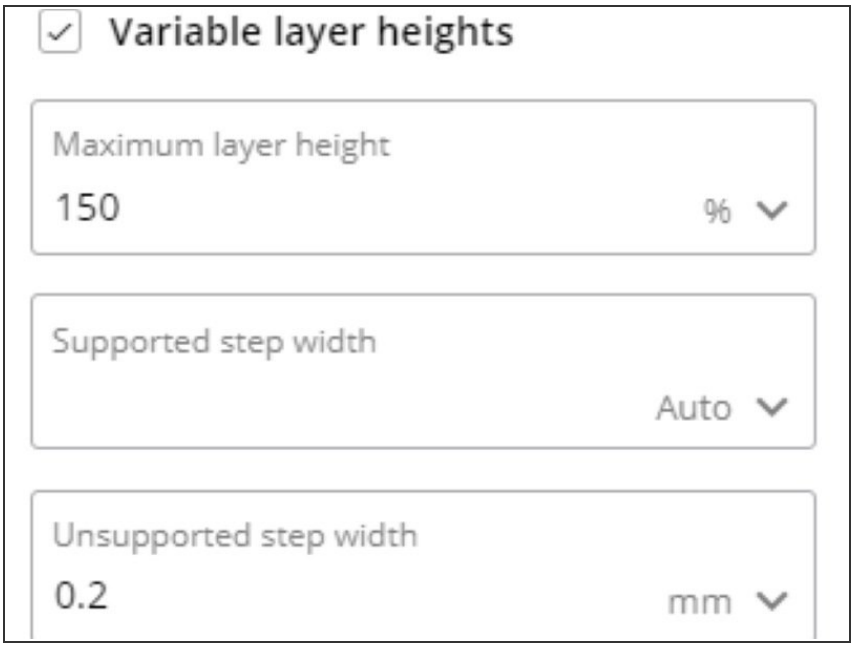
Step 8 — Printer Tagging





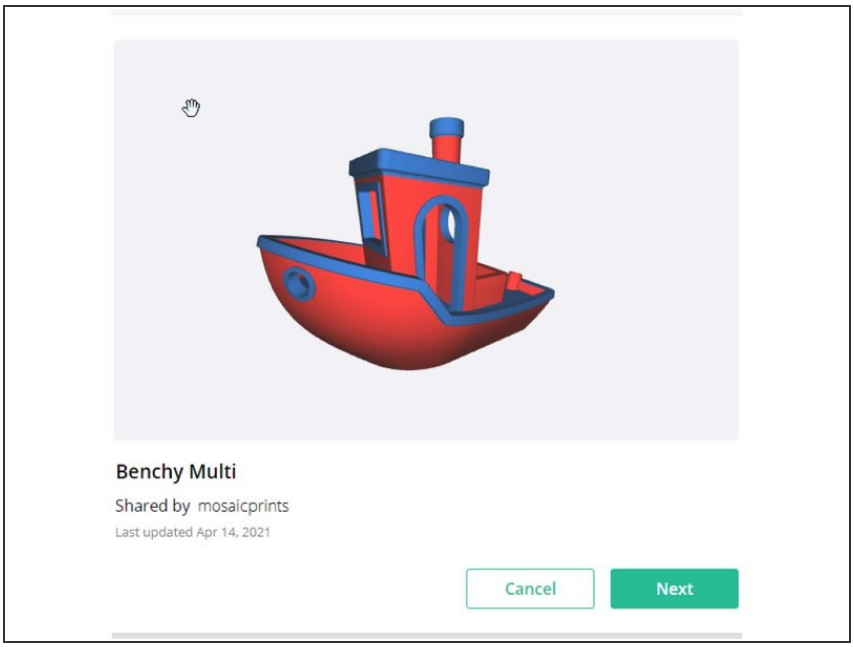
- **Printer tagging aggregates data from other printer profiles. This helps inform what values or settings to use in the printer profile.**
- Select from existing printer models, or create a new entry if the printer is not available.
- **Printer tagging is available under *Printer Profiles > Select/Edit Printer Profile > Edit Printer > Printer Model.***

Step 9 — Variable Layer Heights



- **Variable layer heights allows the slicer to automatically and smoothly change between a minimum and maximum layer height.**
- Minimum layer heights are used where parts have shallow slopes, such as on top of a sphere.
- Maximum layer heights are used for steep slopes or vertical walls.
- **This is available under *Project Settings > Layer > Variable Layer Heights.***

Step 10 — Sharing



- **Sharing allows for printer profiles, style and setting profiles, material profiles and models to be shared with others.**
- Enabling sharing allows others to import the above mentioned with a URL.
- **Sharing is available within an open project, or from the Projects dashboard.**

Have a feature request or want to share feedback? Please visit Canvas on Github or our contact page. Thank you!

