The Filament HT-PLA Printing Guide

To achieve the best performance and ensure a successful 3D-print that is durable, visually fine and dimensionally stable up to 150 °C, please follow the guidelines below.

Printing with the Dedicated The Filament Profile

If you are not fully satisfied with the results when using the Generic PLA profile, you can download and use our dedicated The Filament HT-PLA printing profile.

→ Printing profile for Bambu Lab A1 / P1S / X1C

Not sure how to import printing profile into Bambu Studio?

→ Watch the video

→ Download PDF guide

Printing with the Generic Bambu Lab Profile

The Filament HT-PLA can be printed successfully using the Generic PLA printing profile available in Bambu Studio. For some geometries, however, it may be necessary to adjust temperature and cooling settings.

Not sure how to change temperature and cooling settings?

→ **Watch the video**

→ **Download PDF guide**

Bed adhesion & first layer

- HT-PLA prints similarly to standard PLA, but due to its higher stiffness, ensuring strong bed adhesion is essential.
- The first layer is crucial – make sure the nozzle-to-bed distance is properly calibrated (filament calibration is strongly recommended).
- Cooling: 80–100%, depending on the geometry of the model.
- Flow calibration is strongly suggested.

Bed surface

Because of the material's stiffness, HT-PLA has a tendency to slightly warp at the corners.
Always clean the bed thoroughly before applying adhesives to remove dust and grease.

The best results are achieved on a Cool Plate SuperTack (Bambu Lab) – in many cases no additional adhesive is required.

Recommended bed temperature:
~35 °C.

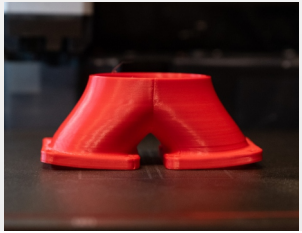
If using a PEI Build Plate or another surface, we recommend additional adhesives such as Dimafix, 3DLac, or Magigoo.

Recommended bed temperature:
~50 °C.

Warping prevention

- With larger models and sharp corners, slight warping may occur – always use a brim (minimum 5 mm) to improve adhesion and stabilize the first layers.
- For large, boxy models, it is recommended to design support structures to be removed later in order to minimize the risk of deformation.

PEI Textured Plate (with brim & adhesive)



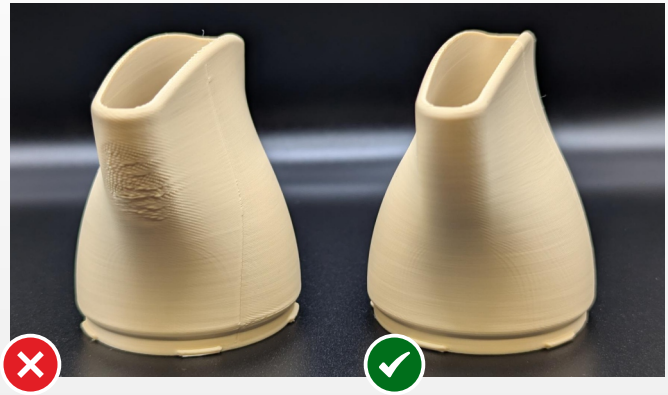
PEI Textured Plate (No brim)

Enclosed 3D printer

On printers with an enclosed chamber, better results can often be achieved with the doors fully open and the top cover removed. This allows the filament to cool down faster and helps prevent the model from deforming on larger prints due to its own weight, or on overhangs due to the material's plasticity.

Open 3D printer

On printers with an open build chamber, it is important not to leave the printer in areas exposed to drafts. Sudden airflows can lead to issues such as warping, layer separation, or poor surface quality.



Model on the left

Closed chamber and top cover and insufficient cooling.

Model on the right

Open door and top cover and 100% cooling.

→ TIP

For printers with an enclosed chamber open the doors and remove the top cover, as HT-PLA filament needs to cool down faster than regular PLA to avoid warping or deformation on larger prints and overhangs.