

3D PRINTING GUIDE TIMBERFILL®

Adhesive recommended

0.6 mm Nozzle recommended

Dry before use it

Second life Sustainable spool

BASIC OVERVIEW

HARDNESS



IMPACT RESISTANCE



FLEXIBILITY



EASY OF PRINTING



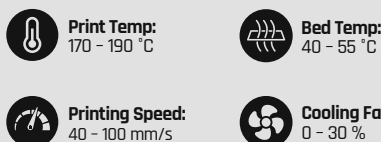
WEATHER RESISTANCE



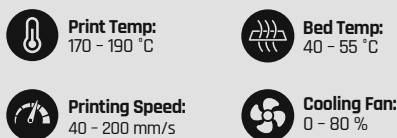
WEAR AND ABRASION RESISTANCE



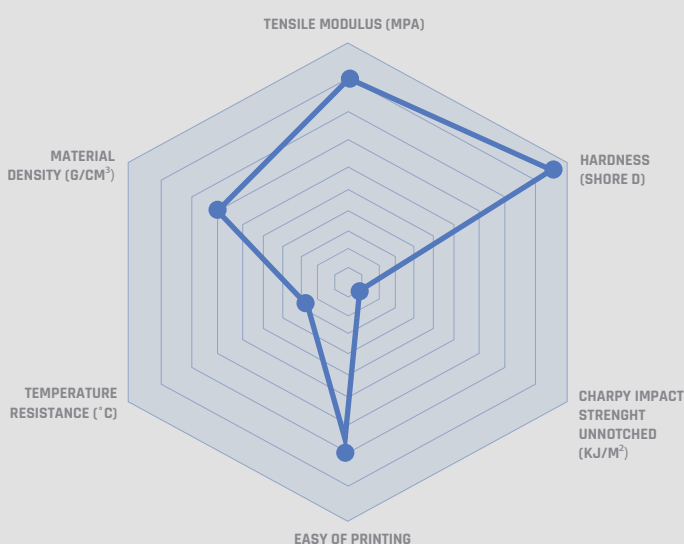
BASIC NON HIGH-SPEED PRINTERS SETUP



HIGH SPEED PRINTERS SETUP



DETAILED VIEW



RECOMMENDED SETTINGS

- Nozzle Size:**
0.5/0.6 mm nozzle is recommended for 1.75 mm filament, and a 0.6/0.8 mm nozzle for 2.85 mm filament. Since wood filaments contain additives, hardened steel or ruby nozzles are advised to reduce wear.
- Higher Printing Speeds:**
Natural fibers in the filament can degrade or burn at lower speeds, potentially causing jams. Printing at slightly higher speeds helps prevent this.
- Storage and drying:**
Store the filament in an airtight bag with desiccant. If the filament becomes moist, dry it at 50 °C for 2 - 3 hours to avoid issues like poor layer adhesion, stringing, or oozing.

TIPS BEFORE YOU START

- HEATED BED SURFACE:** PEI, glass, Kapton, blue tape, or LockPAD, etc.
- ADHESIVE:** Magigoo, 3DLac, or PVA glue.
- RAFT/SKIRT/BRIM:** Skirt / Brim 5 mm
- HEATED CHAMBER/ ENCLOSURE:** Not needed
- Cooling settings:** experiment with lower cooling for better layer bonding, especially for larger objects. In the case of high speed printing, you can try up to 80 %. It depends on the type of 3D printer or model.
- Retraction Settings:** Limit retraction to reduce the chance of cracking and stringing, which are more common with fiber-filled filaments.
- Nozzle Maintenance:** Wood-filled filaments tend to clog the nozzle more frequently. Cleaning the nozzle with a maintenance filament after several prints is recommended.

DATASHEETS AND MORE...
24/7 AVAILABLE

TIPS FOR SUCCESSFUL PRINTING

- Temperature Variation:**
Experiment with temperatures within the recommended range. Lower temperatures can lead to poor layer bonding, while higher temperatures may cause fiber degradation.
- Advanced Nozzle Options:**
For faster prints, consider using a larger nozzle diameter, such as 0.8 mm, for quicker fill and enhanced texture.
- Experiment with Temperature for Aesthetics:**
Varying extruder temperature can produce different shades, giving prints a wood-grain effect. For a more realistic look, change temperatures at different layers, or post-process with sandpaper to smooth surfaces.
- Nozzle Wear Issues:**
Wood particles can cause more nozzle wear or clogging. Change the nozzle regularly or use wear-resistant nozzles.
- Adjust Retraction Settings:**
To reduce issues with stringing and oozing, lower retraction distance and speed, and try enabling features like "Coasting" if your slicer supports it. Reducing retraction issues is essential for a smooth finish without blobs at the layer ends. Z Hop: Disabled!
- Optimize Temperature and Speed:**
Wood filament can burn at high temperatures. Keep the hot end temperature in the lower range and increase print speed to avoid filament degradation.
- Control Stringing and Oozing:**
To minimize stringing, enable settings that avoid crossing the perimeter of your model during travel moves, reducing excess material deposits on the model's exterior.
- Layer Height and Wall Thickness:**
Use a thicker layer height and increased wall thickness for wood filament. Aim for a layer height of 0.2 mm or higher to allow wood particles to lay evenly, reducing the chances of clogging and giving a more stable base layer.
- Filament Feed and Extrusion:**
Use filament guides or rollers to ensure smooth feed through the extruder, as wood filament can be more brittle than standard PLA and break if forced through tight, angled or long paths. Can also occur in the case of an AMS station.
- Warping and Enclosure:**
Wood-based filaments generally don't need an enclosure, but is useful for large models.
- Slicer Settings for Outer Wall Wiping:**
Some slicers have a "wipe" setting, where the nozzle moves over the print line before retracting, effectively wiping excess filament. This can help with blobs on the outer walls and provides a cleaner finish.
- Layer Detachment:**
If layers don't bond well, try reducing print speed or increasing bed temperature.
- Test Print:**
A small test print before starting larger projects helps verify settings.

ARE YOU MISSING THE RIGHT ANSWER?

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24/7 INSTANT ANSWER

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REACTION TIME 12 - 16 HOUR

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BETWEEN 8 AM AND 4 PM CENTRAL EUROPEAN TIME

WE GUARANTEE THE BEST QUALITY WITH CPK PROCESS MEASUREMENT.

At Fillamentum, we go beyond achieving a lower filament diameter. We focus on CPK (Process Capability Index) could be known as a Sigma within Industry. It is a crucial measure that ensures every spool of filament meets the highest standards. Here is Why CPK is essential for you and why it is more important than just diameter.

WE PROVIDE FILAMENT INSPECTION

