

Sample Slic3r settings for Carbon Fiber HTPLA on Prusa MK3

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Layers and perimeters

- Infill
- Skirt and brim
- Support material
- Speed
- Multiple Extruders
- Advanced
- Output options
- Notes
- Dependencies

Layer height

Layer height: mm

First layer height: mm or %

Vertical shells

Perimeters: (minimum)

Spiral vase:

Recommended object thin wall thickness for layer height 0.20 and 2 lines:
0.96 mm, 4 lines: 1.87 mm

Horizontal shells

Solid layers: Top: Bottom:

Quality (slower slicing)

Extra perimeters if needed:

Ensure vertical shell thickness:

Avoid crossing perimeters:

Detect thin walls:

Detect bridging perimeters:

Advanced

Seam position:

External perimeters first:

0.20x5 0.5x2 MK3 HTPLA-CF

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Infill

Fill density: %Fill pattern: Top/bottom fill pattern:

Reducing printing time

Combine infill every: layersOnly infill where needed:

Advanced

Solid infill every: layersFill angle: °Solid infill threshold area: mm²Bridging angle: °Only retract when crossing perimeters: Infill before perimeters:

0.20x5 0.5x2 MK3 HTPLA-CF



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Speed for print moves

Perimeters:		<input type="text" value="40"/>	mm/s
Small perimeters:		<input type="text" value="20"/>	mm/s or %
External perimeters:		<input type="text" value="20"/>	mm/s or %
Infill:		<input type="text" value="90"/>	mm/s
Solid infill:		<input type="text" value="90"/>	mm/s or %
Top solid infill:		<input type="text" value="40"/>	mm/s or %
Support material:		<input type="text" value="90"/>	mm/s
Support material interface:		<input type="text" value="30"/>	mm/s or %
Bridges:		<input type="text" value="40"/>	mm/s
Gap fill:		<input type="text" value="20"/>	mm/s

Speed for non-print moves

Travel: mm/s

Modifiers

First layer speed: mm/s or %

Acceleration control (advanced)

Perimeters:		<input type="text" value="800"/>	mm/s ²
Infill:		<input type="text" value="800"/>	mm/s ²
Bridge:		<input type="text" value="800"/>	mm/s ²
First layer:		<input type="text" value="800"/>	mm/s ²
Default:		<input type="text" value="800"/>	mm/s ²

Autospeed (advanced)

Max print speed:		<input type="text" value="90"/>	mm/s
Max volumetric speed:		<input type="text" value="9"/>	mm ³ /s
Max volumetric slope positive:		<input type="text" value="0"/>	mm ³ /s ²
Max volumetric slope negative:		<input type="text" value="0"/>	mm ³ /s ²

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Extrusion width

Default extrusion width:	<input type="text" value="0.5"/>	mm or % (leave 0 for auto)
First layer:	<input type="text" value="0.5"/>	mm or % (leave 0 for default)
Perimeters:	<input type="text" value="0.5"/>	mm or % (leave 0 for default)
External perimeters:	<input type="text" value="0.5"/>	mm or % (leave 0 for default)
Infill:	<input type="text" value="0.8"/>	mm or % (leave 0 for default)
Solid infill:	<input type="text" value="0.5"/>	mm or % (leave 0 for default)
Top solid infill:	<input type="text" value="0.5"/>	mm or % (leave 0 for default)
Support material:	<input type="text" value="0.8"/>	mm or % (leave 0 for default)

Overlap

Infill/perimeters overlap: mm or %

Flow

Bridge flow ratio:

Other

Clip multi-part objects:

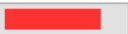
Elephant foot compensation: mm

XY Size Compensation: mm

Resolution: mm

- Filament
- Cooling
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Filament

Color: 

Diameter: mm

Extrusion multiplier:

Density: g/cm³

Cost: money/kg

Temperature °C

Extruder: First layer: Other layers:

Bed: First layer: Other layers:

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Enable

Keep fan always on:

Enable auto cooling:

Fan will always run at 100% except for the first 3 layers

Fan settings

Fan speed: Min: % Max: %

Bridges fan speed: %

Disable fan for the first: layers

Cooling thresholds

Enable fan if layer print time is below: approximate seconds

Slow down if layer print time is below: approximate seconds

Min print speed: mm/s

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Filament properties

Filament type: Soluble material:

Print speed override

Max volumetric speed: mm³/s

First layer volumetric flow rate is maximized when printing external perimeters with a volumetric rate 2.81 mm³/s at filament speed 1.17 mm/s.
Volumetric flow rate is maximized by the print profile maximum with a volumetric rate 9.00 mm³/s at filament speed 3.74 mm/s.
Bridging volumetric flow rate is maximized when printing external perimeters with a volumetric rate 5.03 mm³/s at filament speed 2.09 mm/s.

Toolchange parameters with single extruder MM printers

Loading speed: mm/sUnloading speed: mm/sDelay after unloading: sRamming:

Original Prusa i3 MK3 HTPLA



- General
- Custom G-code
- Extruder 1
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Size

Nozzle diameter: mm

Layer height limits

Min: mmMax: mm

Position (for multi-extruder printers)

Extruder offset: x: y: mm

Retraction

Length: mm (zero to disable)Lift Z: mmOnly lift Z: Above Z: mm Below Z: mmRetraction Speed: mm/sDeretraction Speed: mm/sExtra length on restart: mmMinimum travel after retraction: mmRetract on layer change: Wipe while retracting: Retract amount before wipe: %

Retraction when tool is disabled (advanced settings for multi-extruder setups)

Length: mm (zero to disable)Extra length on restart: mm

Preview

Extruder Color: