

Streak 800mm

PRINT SETTINGS

These settings were created from results obtained from testing using a **Bowden style printer** with **standard PLA** filament. If using other styles of printer or brands of filament, the results could vary. Adjusting the flow rate and retraction settings may be required. Some parts may need “Bed disks” to assist adhesion to the bed. They can be viewed in the “Part orientation images” (POI) folder.

Settings for PLA parts:

Nozzle temp = 215c

Bed temp = 45c

Nozzle diameter = 0.4mm

Extruder multiplier (**EXT**)r = 1.0 or 100%

Extrusion width = .042

Retraction distance (**RD**) = 7mm

Extra restart distance (**ERD**) = 0.18mm

Retraction speed = 150mm/s

Coast at end (**C**) = 0.5mm

Wipe nozzle (**W**)= 2mm

Layer height (**LH**) = 0.25mm

First layer height = 100%

First layer width = 100%

First layer speed = 20%

Print speed = 60mm/s

Outline underspeed = 50%

Solid infill underspeed = 80%

Support structure underspeed = 80%

Cooling fan = 100% for all layers.

Infill percentage (**IF**) is set to 0% unless otherwise stated

Outline direction = inside to outside (**I > O**)

Unless otherwise stated, the start point for each layer is set to Y=0mm and x=100mm.

- 100mm on “x” axis for 200mm X 200mm bed (middle of the “x” axis)

Eg **s.p x=100mm** (start point is 100mm along “x” axis)

Key for part layer height settings:

The diagram illustrates the layer height settings for a part named "Fuse 3". It shows a rectangular part with a start point at (0,0,2) and an end point at 0mm - 1mm. The top solid layers are indicated by a line, and the bottom solid layers are indicated by another line. The start print height is marked at the bottom, and the end print height is marked at the top. The outline/perimeter shells are also indicated.

The screenshots show the printer's settings interface. The left screenshot shows the "Layer Modifications" section with "Start printing at height" set to 0.00 mm and "Stop printing at height" set to 1.00 mm. The right screenshot shows the "Layer Settings" section with "Primary Layer Height" set to 0.2500 mm, "Top Solid Layers" set to 0, "Bottom Solid Layers" set to 0, and "Outline/Perimeter Shells" set to 2. The "Outline Direction" is set to "Inside-Out".

Fuse 1

- 0mm - 1mm (0,0,2)
- 1mm - 35mm (0,0,1)
- 35mm - end (3,0,2)

Fuse 2

- 0mm - 1mm (0,0,2)
- 1mm - 193mm (0,0,1)
- 193mm - end (0,0,2)

Fuse 3**bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 193mm (0,0,1)
- 193mm - end (0,0,2)

Fuse 4**bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 152mm (0,0,1)
- 152mm - end (0,0,2)

Fuse 5**bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 45mm (0,0,1)
- 45mm - end (0,0,2)

Servo covers and motor mount**LH = 0.2mm, IF = 100%**

- 0mm - end (0,500,1)

EXT = 0.9 or 90%, RD = 6mm, ERD, C, W = 0**Elevons inner****bed disk required (refer POI)**

- 0mm - 2mm (0,8,1)
- 2mm - 105mm (0,0,1)
- 105mm - end (0,0,2)

Elevons outer**bed disk required (refer POI)**

- 0mm - 2mm (0,0,2)
- 2mm - 110mm (0,0,1)
- 110mm - end (0,0,2)

Canopy front and rear

- 0mm - 1mm (0,0,2)
- 1mm - end (0,0,1)

Vertical stabilizers**bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 110mm (0,0,1)
- 110mm - end (2,0,2)

Wing inner **bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 125mm (0,0,1)
- 125mm - end (0,0,2)

Wing outer **bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 126mm (0,0,1)
- 126mm - end (0,0,2)

Wingtips **bed disk required (refer POI)**

- 0mm - 1mm (0,0,2)
- 1mm - 20mm (0,0,1)
- 20mm - end (2,0,2)

Bed disk

- 0mm - end (0,2,1)