

Cessna Citation C550 700mm

PRINT SETTINGS

These settings were created from results obtained from testing using a **Bowden style printer** with **Colourfabb LW-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.

Settings for LW-PLA parts:

Nozzle temp = 250c
Bed temp = 60c
Nozzle diameter = 0.4mm
Extruder multiplier (**EXT**)r = 0.35 or 35%
Extrusion width = .042
Retraction distance (**RD**) = 6mm
Extra restart distance (**ERD**) = 0.45mm
Retraction speed = 150mm/s
Coast at end (**C**) = 3mm
Wipe nozzle (**W**) = 3mm
Layer height (**LH**) = 0.2mm

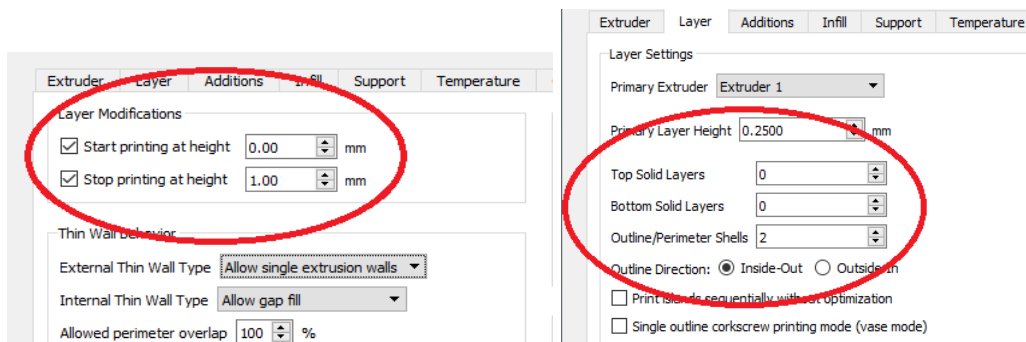
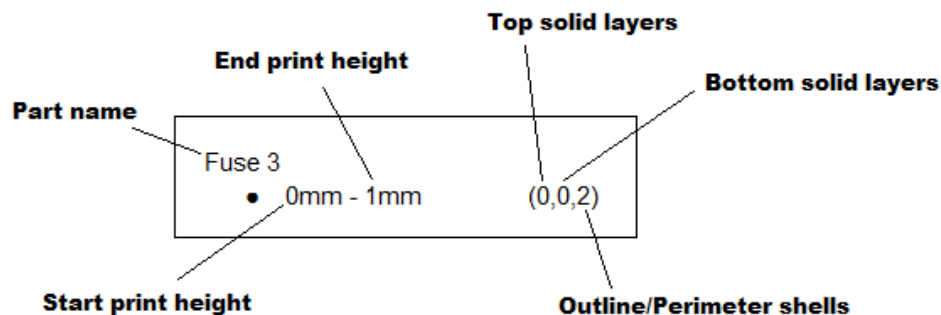
First layer height = 100%
First layer width = 100%
First layer speed = 30%
Print speed = 40mm/s
Outline underspeed = 50%
Solid infill underspeed = 80%
Support structure underspeed = 80%
Cooling fan = 100% for all layers.
Infill percentage (**IF**) is set to 0% unless otherwise stated

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)

Example :



LW-PLA PARTS:

Fuse 1

- 0mm - 1mm (0,0,2)
- 1mm - 64mm (0,0,1)
- 64mm - end (2,0,2)

Fuse 2

- 0mm - 1mm (0,0,2)
- 1mm - 181mm (0,0,1)
- 181mm - end (0,0,2)

Fuse 3

- 0mm - 1mm (0,0,2)
- 1mm - 194mm (0,0,1)
- 194mm - end (0,0,2)

Fuse 4

- 0mm - 1mm (0,0,2)
- 1mm - 150mm (0,0,1)
- 150mm - end (2,0,2)

Ailerons

- 0mm - 2mm (0,10,1)
- 2mm - end (0,0,1)

Elevator inner

- 0mm - end (2,10,1) @ 60% infill

Elevator middle

- 0mm - 1mm (0,2,1)
- 1mm - 98mm (0,0,1)
- 98mm - end (0,0,2)

Elevator outer

- 0mm - 1mm (0,0,2)
- 1mm - 14mm (0,0,1)
- 14mm - end (2,0,2)

Battery hatch front

- 0mm - 1mm (0,0,2)
- 1mm - 120mm (0,0,1)
- 120mm - end (3,0,1)

Battery hatch rear

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

Horizontal stabilizer

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

Vertical stabilizer (both types)

s.p x = 0mm

- 0mm - 29mm (3,0,2)
- 29mm - 118mm (0,0,1)
- 118mm - end (2,0,1)

Engine nacelle front

- 0mm - 1mm (0,0,2)
- 1mm - 20mm (0,0,1)
- 20mm - end (3,0,2)

Engine nacelle rear

- 0mm - 1mm (0,0,2)
- 1mm - 82mm (0,0,1)
- 82mm - end (3,0,1)

wing inner (no gear slot)

- 0mm - 1mm (0,0,2)
- 1mm - 142m (0,0,1)
- 142mm - end (0,0,2)

wing inner (with gear slot)

- 0mm - 1mm (0,0,2)
- 1mm - 29mm (0,0,1)
- 29mm - 33mm (2,2,1)
- 33mm - 142mm (0,0,1)
- 142mm - end (0,0,2)

Wing outer

- 0mm - 1mm (0,0,2)
- 1mm - 142m (0,0,1)
- 142mm - end (0,0,2)

Wingtips

- 0mm - 1mm (0,0,2)
- 1mm - 18mm (0,0,1)
- 18mm - end (2,0,2)

Rudder bottom

- 0mm - 1mm (0,5,1)
- 1mm - end (0,0,1)

Rudder middle

- 0mm - 1mm (0,5,1)
- 1mm - 102mm (0,0,1)
- 102mm - end (0,0,2)

Rudder top

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

Settings for PLA parts:

Nozzle temp = 215c
Bed temp = 45c
Nozzle diameter = 0.4mm
Extruder multiplier = .9 or 90%
Extrusion width = .042
Retraction distance = 6mm
Extra restart distance = 0mm
Retraction speed = 150mm/s
Layer height = 0.1mm
First layer height = 100%
First layer width = 100%
First layer speed = 20%
Print speed = 65mm/s
Outline underspeed = 50%
Solid infill underspeed = 80%
Support structure underspeed = 80%
Cooling fan = 100% for all layers.
Infill percentage is set to 0% unless otherwise stated

PLA PARTS:

- Nose gear steering arm *support material required 40% infill, .5mm offset from part*
- 0mm - end (0,60,1) @ **100% infill**
- Nose gear washers and wheel locks
- 0mm - end (0,0,1) @ **100% infill**