PRACTICAL PRINTING



A handy cheat sheet for 3D printing resin

USEFUL PRINT TESTS

1) VALIDATION MATRIX

Use this to find the perfect layer exposure time for your printer/resin combination.

Do this test

- ▶ When you first get a your 3D Printer
- Every time you use different or mix resin
- ► Every time you change layer height
- Every 6 months

2) MAKE:ROOK MODEL TEST



If you are printing the validation matrix perfectly try to print a more detailed and three dimensional model like this Make:Rook model.

Good for testing overhangs & legibility of text from multiple angles. This little treasure will help you get the best print possible.

Download at coreelec.io/resintest



Bars would fit Slots if moved down

The same amount of Pins & Voids

Download at ce-guides.com/resintests

Two halves of the infinity sign should touch perfectly with no overlapping.



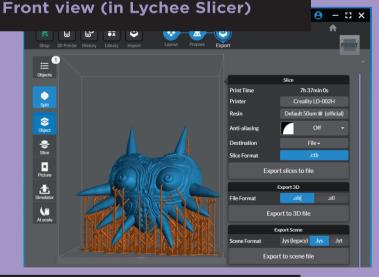
Used to test 3D filament printing & traditionaly it is also a useful test for your resin printer.
Use it to ensure dimension accuracy in different axis

Download at coreelec.io/30

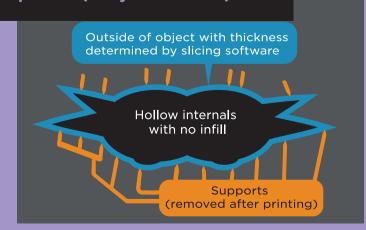
WORKFLOW

Design > Slice > Print > Wash > Dry > Cure

COMPUTER VIEWS



Top view (in Lychee Slicer)



Recommended outputs for fine prints are: smallest layers + Anti-aliasing of 4-8

Popular Guides

PRINTER SIDE VIEW Moves up and down This diagram will help you

Print Platform
Print
Liquid Resin

FEP (Fluorinated Ethylene Propylene) Sheet

LCD Screen
(Monochrome or RGB)

UV Projector

will help you understand whats going on inside your printer

CALCULATING EXPOSURE TIME

As a general rule for normal layer exposure time you will need

- ▶ 0.5 5 Seconds (monochrome)
- ▶ 2-20 Seconds (RGB screens)Average layer height will be between 10-50 Microns

You will need 8-12 bottom layers

longer than normal layers.

Our recommended time is roughly 8-12 X normal layer exposure time.

(No longer than 30 Secs - higher values will overheat the resin)

Printer maintenance ce-guides.com/fep