Reinforced Economical Gridfinity Bins - No vase mode (w/ half grid)

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Summary

Sturdy gridfinity bins that don't take much material to print. Customizable via OpenSCAD.

Hobby & Makers   >   Organizers

Tags: parametric customizable organization bin gridfinity gridfinitybin

Printing

I printed the bins with both 0.4 mm and 0.6 mm nozzles, both work fine. There are all variations of the bins from 1x1x1 to 7x7x10, in regular- and half-grid variations (although most are obviously untested).

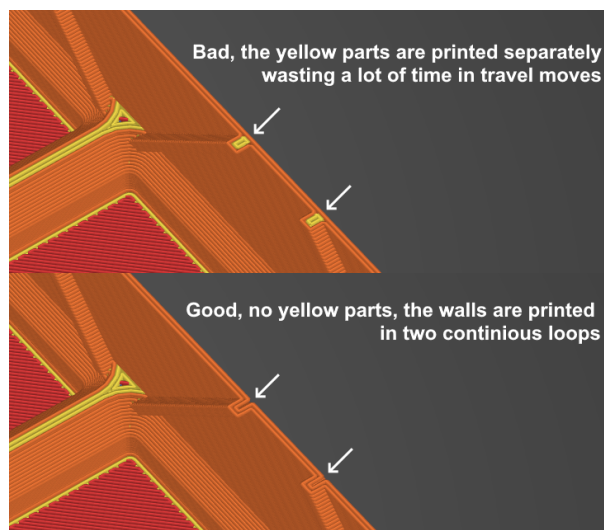## Recommended settings

PrusaSlicer:

- Print settings -> Layers and perimeters -> Vertical shells -> set "Perimeters" to 1
- Print settings -> Advanced -> Slicing -> set "Slice gap closing radius" to 0.01
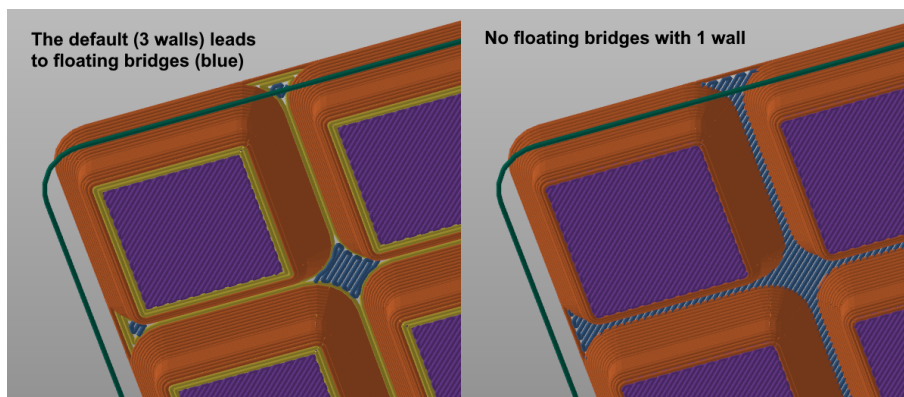- Print settings -> Infill -> Advanced -> set "Bridging angle" to 45

Cura:

- Print settings ->Walls -> enable "Print thin walls"
- Print settings ->Walls -> set "Wall Line Count" to 1

Why use these settings:

Slice gap closing radius / Print thin walls:

Perimeters / Wall Line Count:

About

There are a couple of good economical vase mode designs out there already, but they share a problem: vase mode is a pain if you need lots of bins. Vase mode requires that your models are nicely spaced apart, so my printer only fits 2-3 bins at a time.

This other model solves this problem by implementing a very similar design which doesn't require vase mode, but I found those bins to be quite flimsy when stacked and easy to snap along the layer lines.

So, I took the original vase mode design as an inspiration and fully reimplemented it in OpenSCAD, borrowing many ideas from the models linked above. Each layer still consists of closed loops, similarly to vase mode, but with the benefit of letting you place many bins right alongside each other on the print bed. I also borrowed the corrugated lip from this model, mostly because I like the way it looks, but also to add some rigidity for better stacking. I exported all the variations of the bins from 1x1x1 to 7x7x10, most are untested.

This remix is based on

Gridfinity lite - economical plain storage bins

by Jake

Gridfinity - Enhanced Vase Bins (no label flaps) (90 models)
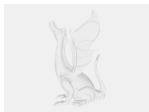
by cyron52

Model files
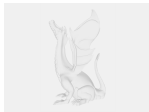

10x10_6u.3mf

15x25_6u.3mf

Other files

regular-grid.zip

half-grid-1-8u-high.zip

half-grid-9-10u-high.zip

sources.zip

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