



Parametric dovetail organizer: boxes, bins, drawers. all vase mode prints.

 Tree House

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Summary

Major update 2019-June-28 - See notes below... A fully parametric (customizable) organizer. Create a single box or bin...

[Household](#) > [Other House Equipment](#)

Tags: [bin](#) [box](#) [organizer](#) [smallpartsstorage](#) [vase](#)

Major update 2019-June-28 - See notes below...

A fully parametric (customizable) organizer. Create a single box or bin or a drawer. Combine them to make a scalable organizer.

All printed in vase mode .4 nozzle using a .6 width. These are very sturdy unless you go really big.

I've included a simple snap fit drawer pull. I used a heated rod to make a hole to install the drawer pull. Glue should not be necessary.

Let me know if you have any problem printing/fitting the samples.

Installation:

unzip obiscad.zip to an /obiscad folder in same folder as dovetailbox.scad

Usage Notes:

Boxes, bins and drawers are made based on a reference cube which has dovetails

added and subtracted on the X and Y axis.

entering

$[X,Y,Z]=[40,50,70]$

will give you 40x50x70 box with dovetails attached to 2 sided and dovetails

subtracted from 2 sides for final dimensions:

$[40+\text{dovetail}, 50+\text{dovetail}, 70]$

Drawers will be correspondingly smaller in the opposite direction since they

need to fit inside the box which has had inner dovetails subtracted. Then there is the added difference of the drawer gap which makes the drawer smaller still for an easy fit.

2019-June-28

I moved all of the beveling to the obiscad beveling library <https://www.thingiverse.com/thing:30336>

Most of the bevels scale cleanly now with changes to the box dimensions... The

left and right beveling on the bin angled cuts still need to be tweaked a little when you resize the bin. This process is much easier now. Enable debugBinBevels and change the bevel correction parameters.

If anyone manages to anchor the angled cut bevels:

openingLeft / openingRight / bottomLeft / bottomRight in module doveBin()

to the cut edges correctly please let me know how and I'll update the source.

Print Settings

Printer Brand:

Creality

Printer:

CR10S PRO

Rafts:

No

Supports:

No

Resolution:

.2

Infill:

vase mode

Filament: PLA

Notes:

Vase Mode!

.4 nozzle

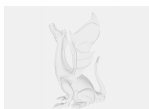
.2 layer height

(boxes and drawers can be printed at .4, angled bin overhangs will fail at .4)

.6 line width (this is important. Very strong)

Category: Containers

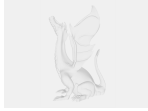
Model files



bevel.scad



50x50x70_pin_12x25x30deg_25s6g_drawer.stl



vector.scad



bcube.scad



attach.scad



40x50x70_pin_12x25x30deg_25s6g_cube.stl



50x50x70_pin_12x25x30deg_25s6g_cube.stl



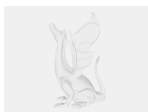
40x50x70_pin_12x25x30deg_25s6g_drawer.stl



pull.stl



40x50x70_pin_12x25x30deg_25s6g_bin.stl



dovetailbox.scad

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