



Latch Modular Drawers - Vase Mode



aamott

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Summary

Modular drawers that don't fall out when you tip them! Front latch and rear catch, & mini modular drawers for the inside

[Household](#) > [Office](#)

Tags: [modular](#) [storage](#) [drawer](#)

Onshape link for remixing: [Onshape | Vase Mode Modular Drawers Update - 10/12/2022](#)

Improved some tolerances, added an Ikea Lack hanging mount, and added some more small drawer sizes, including one 3x1 with texture. In theory, you could fill a whole side of a lack table with 1.5 rolls of filament (35 cents a drawer, 9x8 drawers, \$18 per roll, plus some mini drawers and hangers).

Update - 10/9/2022

V2 is here, and considerably improved. The old joints are incompatible, so don't plan to mix and match (although you could squeeze them together). The photos at the end with no latches are V1. All others are V2.

Upcoming

- More mini drawers sizes
- 0.6mm nozzle version (hint: you don't actually need a 0.6mm nozzle, just tell your slicer you have it)

Ideas for remixes

- Different patterns on drawers
- Wall mount
- Magnet mount
- Nozzle storage mini unit
- Tool holders that mount on the side of drawers
- Tip-out drawer

V2

Features

- Catch stops the drawer from falling out
- Latch keeps the drawer from opening randomly
- Dragon scale-esque design to improve durability
- Mini storage units that fit inside the drawers
- Under-desk mount/Ikea Lack table mount

Each drawer and shell takes me roughly 1 hour and 15 minutes to print with a 0.4mm nozzle and 0.24mm layer height. The only part printed normally is the latch. It's optimized for these settings, but the design is parametric and should adjust well to most values.

Note that the shell models should be printed facing up. The square cutout should be facing down.

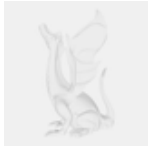
V1

My time to print a drawer and shell was only about 1 hour total. Printed at 40mm/s, 52mm/s bottom layer (loving this FR4 build plate) and 2 bottom layers.

These modular drawers are printed in vase mode with a 0.4mm nozzle at 0.45mm line width and a 0.22mm (no typo) layer height, but I'll include an Onshape link to make remixing easier. It's parametric, meaning you can change the values in the link to make it fit other line widths and layer heights more effectively.

Includes a catch to keep the drawer from falling out.

This remix is based on



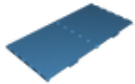
Onshape

Model files



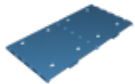
V2.1 - Improved tolerances

18 files



hanging-mount-no-holes.3mf

☐ Print with a brim or raft, unless you have incredible bed adhesion (see: FR4 and glue stick)



hanging-mount-predrilled-holes.3mf

☐ Untested. Don't print in vase mode. Just normal with a brim or raft.



shell-1x-length.3mf

☐ Print square hole facing the bed

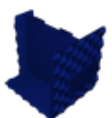


latch.3mf

☐ Print laying down then break loose the middle part. Use some lithium grease if you want.



drawer-1x-length.3mf



drawer-of-drawers-1x-length.3mf



drawer-no-catch-1x-length.3mf

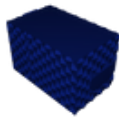


drawer-of-drawers-no-catch-1x-length.3mf

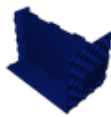


shell-15x-length.3mf

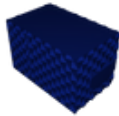
☐ Print square hole facing the bed



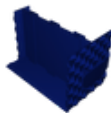
drawer-15x-length.3mf



drawer-of-drawers-15x-length.3mf



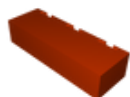
drawer-no-catch-15x-length.3mf



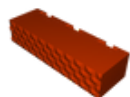
drawer-of-drawers-no-catch-15x-length.3mf



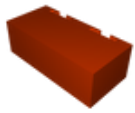
mini-drawer-1x1.3mf



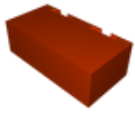
mini-drawer-3x1-smooth.3mf



mini-drawer-3x1-textured.3mf



mini-drawer-2x1.3mf



mini-drawer-2x1-smooth.3mf



V2.0

11 files



latch.3mf

☐ Print laying down then break loose the middle part. Use some lithium grease if you want.



shell-1x-length.3mf

☐ Print square hole facing the bed



drawer-1x-length.3mf

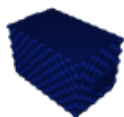


drawer-of-drawers-1x-length.3mf

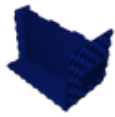


shell-15x-length.3mf

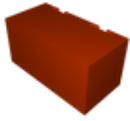
☐ Print square hole facing the bed



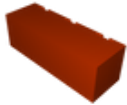
drawer-15x-length.3mf



drawer-of-drawers-15x-length.3mf



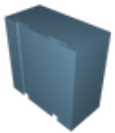
mini-drawer-2x1.3mf



mini-drawer-3x1.3mf



mini-drawer-1x1.3mf



mini-drawer-2x2.3mf



V1

2 files



shell-v1.3mf



drawer-v1.3mf

[Find source .stl files on Thingiverse.com](#)

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