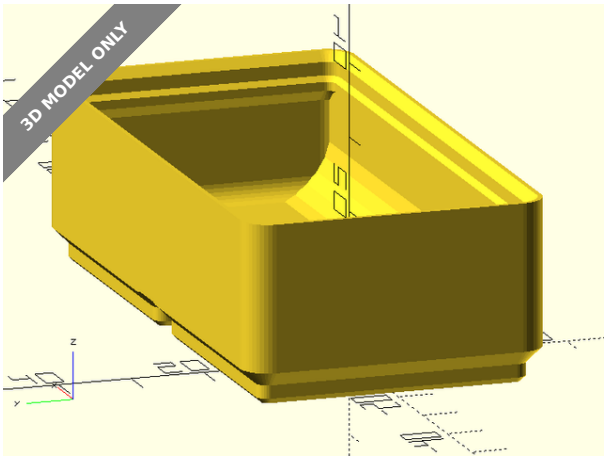

Gridfinity OpenSCAD Model

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VIEW IN BROWSER

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Summary

Attempt at recreating Zack Freedman's awesome Gridfinity system using OpenSCAD, with some additional options and models.

Hobby & Makers > Organizers

Tags: openscad gridfinity

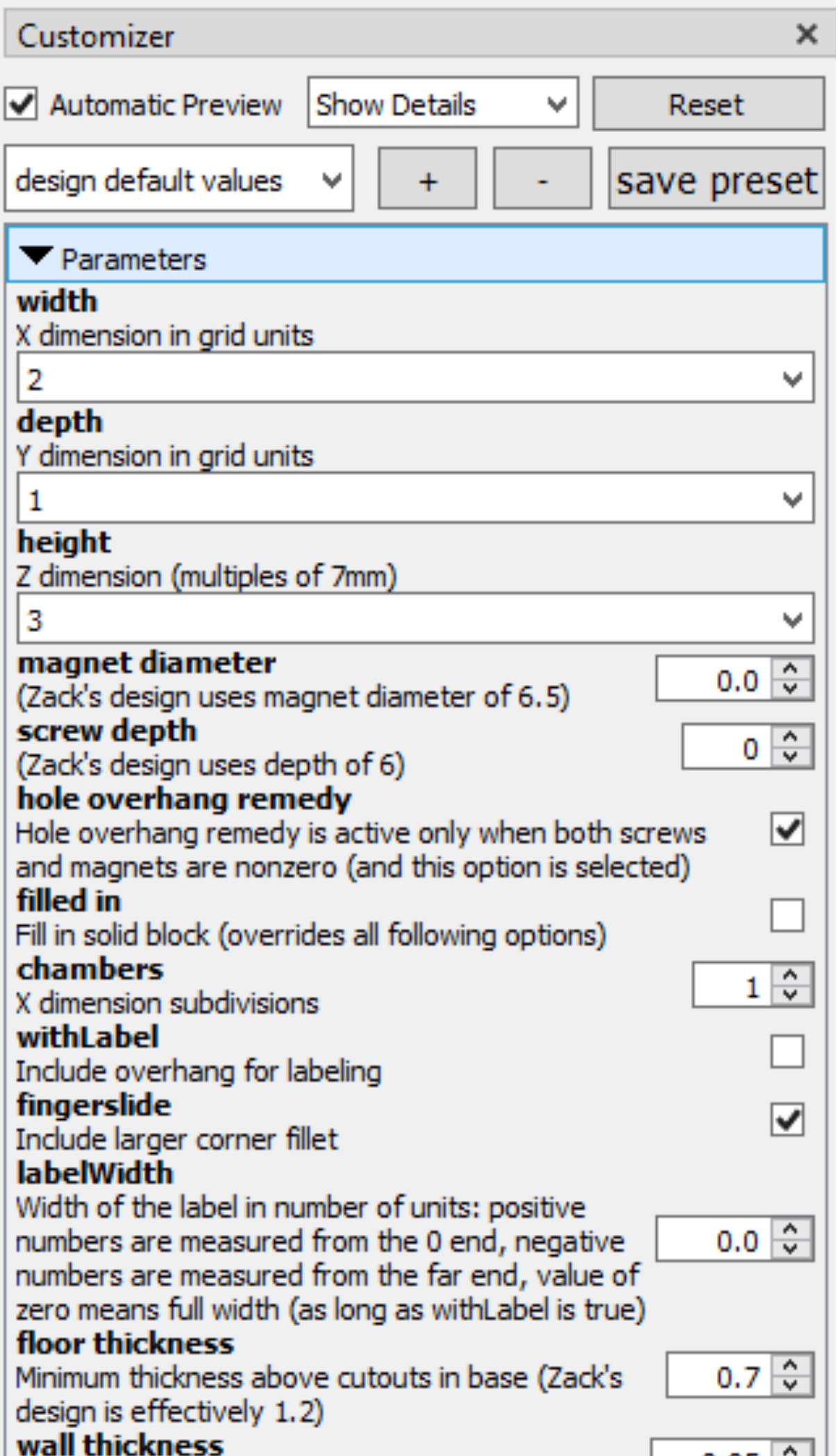
This is a recreation of Zack Freedman's gridfinity system in OpenSCAD, intended for both experienced OpenSCAD users to customize with added features, and also less-experienced OpenSCAD users to customize via options offered in the customizer.

The fit-related dimensions are intended to match Zack's original design exactly.

Options for bins:

- Screw holes are optional, or alternative lengths can be specified
- Magnet pockets are optional, or alternative diameters can be specified
- User-selectable wall thickness and floor thickness
- Generate a filled-in block as a starting point for generating other models (similar in spirit to this)
- Any number of subdivisions along X axis (only X subdivisions and only evenly spaced divisions are implemented)

- Finger-slide for removing small parts, available as an option
- Label feature available as an option
- Label feature can cover entire X length or only part
- Magnet/screw hole can have printable overhangs as an option (if screw holes and magnet pockets are both used) (similar in spirit to this)
- Option for material-efficient floor that is not flat but saves material/time (similar in spirit to this)
- Fractional-width bins (0.5 units) supported (similar in spirit to this)
- Option to remove inner lip (thanks to MakerMe for suggestion)


Customizer
Automatic Preview
Show Details
Reset
design default values
+
-
save preset
Parameters
width
X dimension in grid units
2
depth
Y dimension in grid units
1
height
Z dimension (multiples of 7mm)
3
magnet diameter
(Zack's design uses magnet diameter of 6.5)
0.0
screw depth
(Zack's design uses depth of 6)
0
hole overhang remedy
Hole overhang remedy is active only when both screws and magnets are nonzero (and this option is selected)
filled in
Fill in solid block (overrides all following options)
chambers
X dimension subdivisions
1
withLabel
Include overhang for labeling
fingerslide
Include larger corner fillet
labelWidth
Width of the label in number of units: positive numbers are measured from the 0 end, negative numbers are measured from the far end, value of zero means full width (as long as withLabel is true)
0.0
floor thickness
Minimum thickness above cutouts in base (Zack's design is effectively 1.2)
0.7
wall thickness

Some other models are also included and are also parametric. Not all of these will be interesting to most people. Some of them are cosntructions for my own personal use.

- Gridfinity base options
  - Base (just frame)
  - Weighted base includes space for weights and/or screws or magnets
  - Lid/base combination can stack on top of bins and provides base for stacking on top (e.g. for stacking a 1x1 on top of a 3x3)
- Glue stick holder
- Socket holder
- Gridfinity base for Flsun Q5
- Silverware drawer

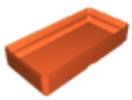
The included STL files are mainly examples. There are too many combinations, and I prefer not to spam with too many files. In other words, I am expecting you will use the OpenSCAD models to generate the dimensions you want.

To keep track of my work I'm also keeping this on GitHub: https://github.com/vector76/gridfinity_openscad

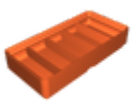
Special thanks to Zack Freedman, and to contributors on GitHub who are adding models and providing comments!

Model files

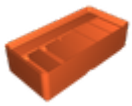
Renders 17 files



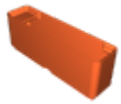
basic_cup_2x1x2.stl



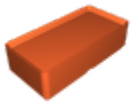
divided_cup_2x1x2x5.stl



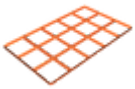
divided_cup_2x1x3x5.stl



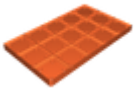
basic_cup_halfx2x4.stl



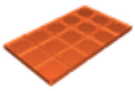
filled_block_2x1x3x5.stl



baseplate.stl



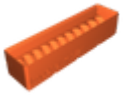
weighted_baseplate.stl



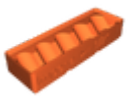
base_lid.stl

glue_stick_cup.stl

socket_holder_imperial.stl

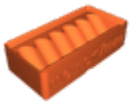


socket_holder_imperial_small.stl

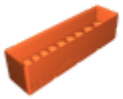


socket_holder_imperial_big.stl

socket_holder_metric.stl



socket_holder_metric_small.stl



socket_holder_metric_stacking.stl

flsun_q5.stl

basic_cup_1x1x3_nolip.stl

gridfinity_basic_cup.scad

gridfinity_baseplate.scad

gridfinity_cup_modules.scad

gridfinity_modules.scad

gridfinity_socket_holder.scad

gridfinity_glue_stick.scad

gridfinity_flsun_q5.scad

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