

Gridfinity Drawer Spacers Print & Fit Guide

Filler strips that close the gap between a Gridfinity grid and your drawer walls.

12 Widths

6 Lengths

No Supports

Built by MakerX Designs · Virginia Beach, VA · makerxdesigns.com · © 2026

Gridfinity runs on a 42 mm grid. Drawers do not. Build the biggest grid that fits and there is almost always a strip left over down one side and across the front, and the whole grid slides every time you open the drawer.

These spacers fill that strip. Each one is a 5 mm-tall bar with a thin 0.4 mm lip along one side. The lip slides under the edge of your baseplate, and the bar fills the gap between the plate and the drawer wall. The plate cannot move, and the spacer cannot lift out because the plate is sitting on its lip.

The number on a spacer is the gap it fills, not how wide it is. A 40 fills a 40 mm gap. Measure the empty space and print that number.



Two spacers on two edges of a baseplate. The grid stops sliding because there is nowhere left for it to go.

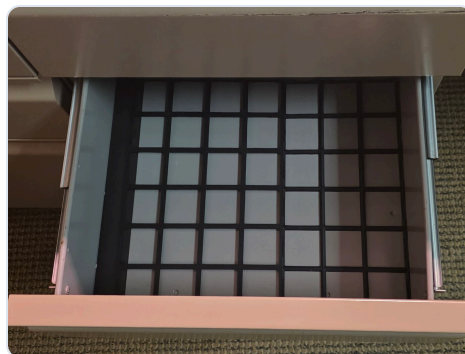
In the download

File	What it is
<code>makerx-gridfinity-04.8mm-spacer-set.3mf</code>	Start here. One 3MF per width, 12 in all. Each holds that width in all six lengths on one plate, with the tested profile.
<code>makerx-gridfinity-spacer-04.8mm-3grid.stl</code>	Every part on its own, 72 in all, for your own slicer or a smaller bed.

Reading a file name: `04.8mm` is the gap it fills and `3grid` is its length in grid squares ($3 \times 42 = 126$ mm). The widths are zero-padded so a file browser lists them in size order.

1 • Measure the drawer

- 1 Measure the inside of the drawer, **width and depth**, in millimeters.
- 2 Divide each by 42 and **round down**. That is how many grid squares fit each way.
- 3 Multiply back by 42 and subtract from the drawer. What is left, each way, is the strip the spacers fill. It is always under 42 mm.
- 4 **Push the grid into one back corner.** Now there is one strip down one side and one across the front, and you need spacers along two edges only.



The drawer these were designed for. A 14-square row is 588 mm; the drawer is 605.

★ Corner the grid, do not center it

Centered, the leftover splits into four strips of up to four different sizes, and every one needs its own spacers. Cornered, it is two strips and half the printing.

A worked example

	Width	Depth
Drawer inside	605 mm	480 mm (example)
÷ 42, rounded down	14 squares	11 squares
Grid	588 mm	462 mm
Leftover strip	17 mm	18 mm
Spacers in it	$15 + 1.2 = 16.2$ (0.8 left)	$15 + 2.4 = 17.4$ (0.6 left)
The strip runs along	the grid's 11-square side	the grid's 14-square front
Lengths to print	6 + 5 grid, in each width	6 + 6 + 2 grid, in each width

Spacers come up to 6 squares (252 mm) long. For a longer edge, butt two or more end to end until they add up to the edge of the grid.

Sized for a 4.65 mm baseplate

The spacer body is 5.00 mm tall. Under a 4.65 mm plate its 0.4 mm lip brings the plate edge to 5.05 mm — flush to the eye. On a thicker magnet or screw baseplate the spacer will sit low. It still holds the grid; it just will not be flush.

2 • Choose the widths

Trim sizes	1.2 · 2.4 · 3.6 · 4.8 mm
Main sizes	5 · 10 · 15 · 20 · 25 · 30 · 35 · 40 mm
Lengths	1 to 6 grid squares · 42 / 84 / 126 / 168 / 210 / 252 mm

- 1 Take the **widest spacer that is not wider than the strip**.
- 2 If 1.2 mm or more is still open, add the widest spacer that fits what is left.
- 3 Stop there. Two pieces per strip always gets you within about a millimeter.

Always round down

A spacer wider than the gap will not go in — there is no squeezing it. Round every choice down. The worst you can be left with is 1.1 mm, which is inside the error of measuring a drawer with a tape.

Two in one strip

Put the wider spacer against the grid, lip under the baseplate. The second piece goes between it and the drawer wall, with its own lip tucked under the first spacer — the same way the first one tucks under the plate. Nothing is loose: the outer piece is trapped between the inner one and the wall.



A thin trim piece pulled forward beside a wider spacer. Its lip runs under the wider one.

3 • Lay it in

- 1 Set the grid in the drawer, pushed hard into its back corner.
- 2 Slide each spacer in **lip first**, under the edge of the baseplate, until the bar meets the plate. The engraved number faces the drawer wall.
- 3 Any spacer works on any edge: turn it end for end to put the lip on the other side. There are no left- and right-hand versions.
- 4 Where the two strips meet there is a small square with nothing in it. Leave it. It sits in the corner under your bins, and nothing depends on it.



Lip under the plate, top level with the grid.

4 • Print only what you need

Every set plate needs a 260 mm bed

Each set 3MF carries a 6-square piece, so every plate is **252 mm across**. A 220 or 235 mm bed will not take a full set plate. On a smaller bed, print from the loose STLs — you only need the lengths in your list anyway.

- 1 Open the set 3MF for a width you need, or drop the loose STLs you need onto a plate.
- 2 If it asks whether to load the project's print settings, **say yes**.
- 3 Delete any lengths you do not need before you slice. Every piece prints flat as it comes, lip on the bed, with no supports.

The profile in the 3MF	
Layer height	0.10 mm, first layer too
Walls	2 loops
Top / bottom	4 / 3 layers
Infill	10 % gyroid
Supports / brim	None / none
Filament	PLA
Nozzle / bed	220 °C / 60 °C
Printer	Creality Hi, 0.4 mm nozzle

Trust the number, not the name

The profile inside the 3MF is still named "PLA 0.20mm". The layer height actually set is 0.10 mm. Check the field, not the label.

Width	Full plate	PLA
1.2 mm	42 m	10.20 g
2.4 mm	1 h 07 m	16.53 g
3.6 mm	1 h 12 m	17.64 g
4.8 mm	1 h 24 m	20.09 g
5 mm	1 h 28 m	20.45 g
10 mm	1 h 51 m	29.56 g
15 mm	2 h 10 m	38.70 g
20 mm	2 h 28 m	47.63 g
25 mm	2 h 49 m	56.90 g
30 mm	3 h 06 m	65.26 g
35 mm	3 h 28 m	75.04 g
40 mm	3 h 43 m	83.08 g

A full plate is all six lengths of one width. Delete the lengths you do not need and the time drops with them.

Before you slice

- ☐ Your list of widths and lengths, rounded down.
- ☐ Bed at least 260 mm for a set plate — or loose STLs instead.
- ☐ Layer height still 0.10 mm after loading the settings.



Every piece carries its width, to one decimal, once per grid square.

Where precision meets the printer

Thanks for printing these. If your drawer finally stopped sliding, that is exactly what they were designed to do.

For years my design world existed entirely behind a screen. As a mechanical engineer I spent countless hours building complex CAD models, but there was always a missing link — the ability to hold an idea in my hands. That changed in January 2026, when I went headfirst into 3D printing. The moment that first layer stuck to the bed, the gap between concept and reality vanished.

Coming from a background where precision is everything, tolerances aren't suggestions to me — they are a religion. I didn't want to print trinkets; I wanted to apply industrial engineering discipline to desktop manufacturing. Every wall count, every layer height and every infill percentage in this guide is a deliberate decision backed by testing. If a part can't handle the environment it was built for, it goes back to the drawing board.

Three principles behind every print

01

Functional Engineering

High-utility, real-world solutions rather than purely decorative models. If it doesn't solve a practical problem, it doesn't leave the workstation.

02

Rigorous Tolerances

Designed in professional CAD with mechanical intent — press-fits that click and assemblies that work straight off the build plate. No sanding, no filing, no guesswork.

03

Bridging the Gap

Industrial structural integrity at maker speed. Proving a desktop printer can produce parts worthy of real engineering applications is what drives every release.

The workshop

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A note on sharing

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Every drawer is a different size, which makes every install a little different. Post a make with your drawer size and the spacers you chose — that is the photo that helps the next person work out theirs.

Happy organizing. — MakerX Designs · makerxdesigns.com · © 2026