

## Magnet Bottle Holder

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## Guide Contents

Guide Contents	2
Overview	3
Save Storage Space!	3
Modify and Remix!	3
Parts	4
Tools and Supplies	4
3D Printing	5
3D Printed Part	5
Slicer Settings	5
Customize The Design	5
Resizing Magnet slots	6
Editing pattern	6
Resizing strip	7
Filament Materials	7
Tolerances	7
Assemble	8
Assembly	8
Add Foam Tape	9
Position Strip	10
Save Space!	11

## Overview



### Save Storage Space!

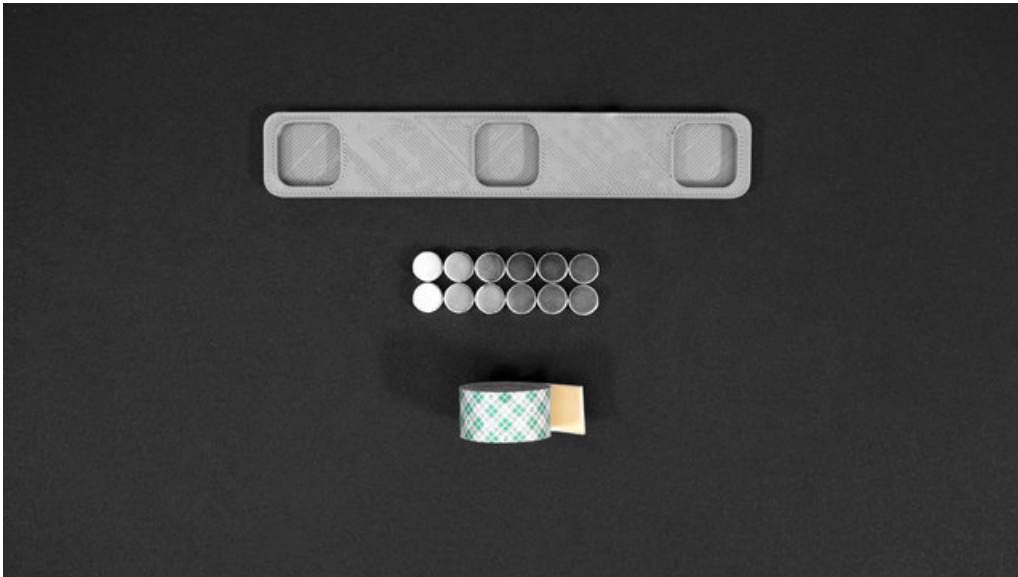
This project can help you save space in your refrigerator! A 3D printed strip holds a series of rare earth magnets that are strong enough to hold different types of containers.

The 3D printed strip features three grooves where 1/2" diameter sized magnets can snap fit into. The strip is then mounted to the top inside of your refrigerator with double-sided foam tape.



### Modify and Remix!

The strip has three spots for a set of four magnets, which can hold up to three different containers - But you can tweak the design to make it longer!



## Parts

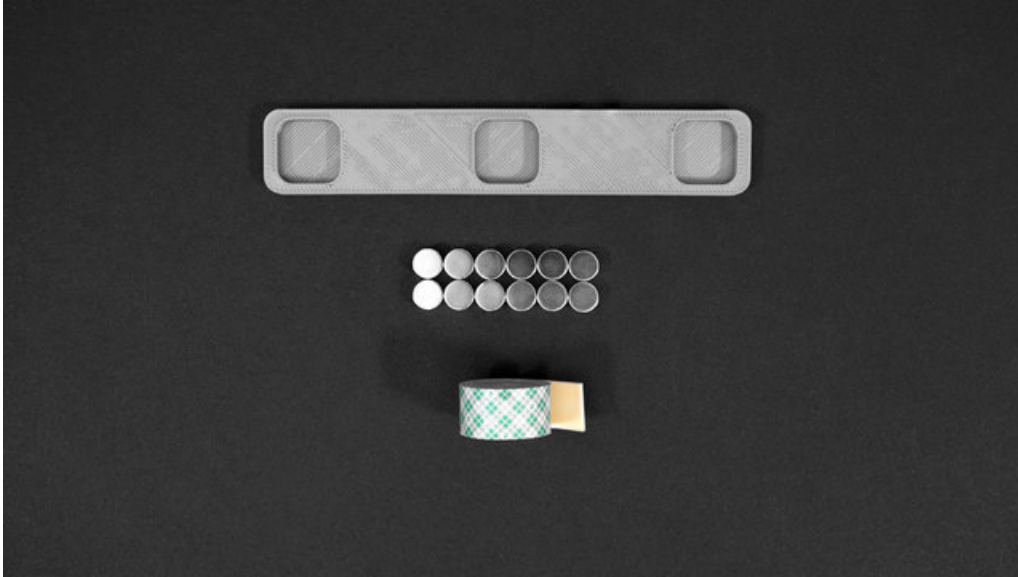
You only need a handful of magnets, some double-sided foam tape and a 3D printer to make this project.

- [12x Magnets \(http://adafru.it/9\)](http://adafru.it/9)
- [3D Printing Filament \(http://adafru.it/2080\)](http://adafru.it/2080)

## Tools and Supplies

- [3D Printer \(https://adafru.it/doT\)](https://adafru.it/doT)
- Hobby Knife
- Foam Tape

## 3D Printing



<https://adafru.it/oEQ>

<https://adafru.it/oEQ>

## 3D Printed Part

The strip holds the magnets in place by press fitting them into the groves.

## Slicer Settings

To slice the strip part, we used Simplify3D. We recommend using the settings below or use them as reference. We 3D printed the part on a Ultimaker 2+ with a 8mm nozzle. If you have Simplify3D, you can download our profiles below.

<https://adafru.it/oHD>

<https://adafru.it/oHD>

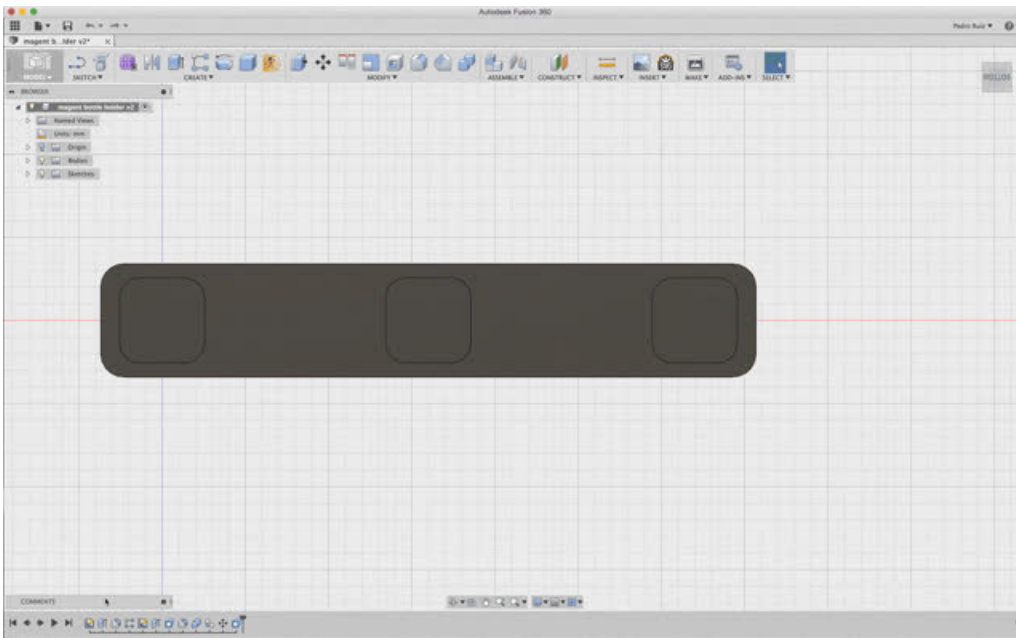
magneetStrip.stl	235c extruder 50mm/s print speed 120mm/s travel speed 0.8mm Nozzle .96mm Extrusion width  Lay the strip flat so the slots are on top. No supports required.	The strip doesn't require any detail, so we used a .8mm nozzle to speed up print time to one hour.
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## Customize The Design

The parts were designed in Autodesk Fusion 360. The design is public and available to download in different formats. If you'd like to use a different CAD software package, you are free to import the files and remix them.

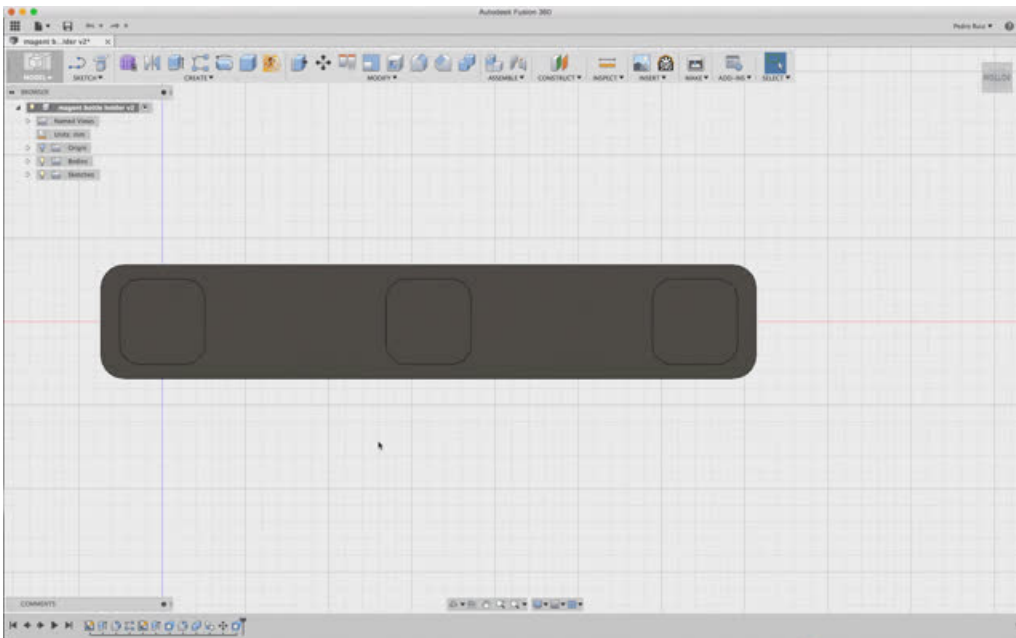
<https://adafru.it/oER>

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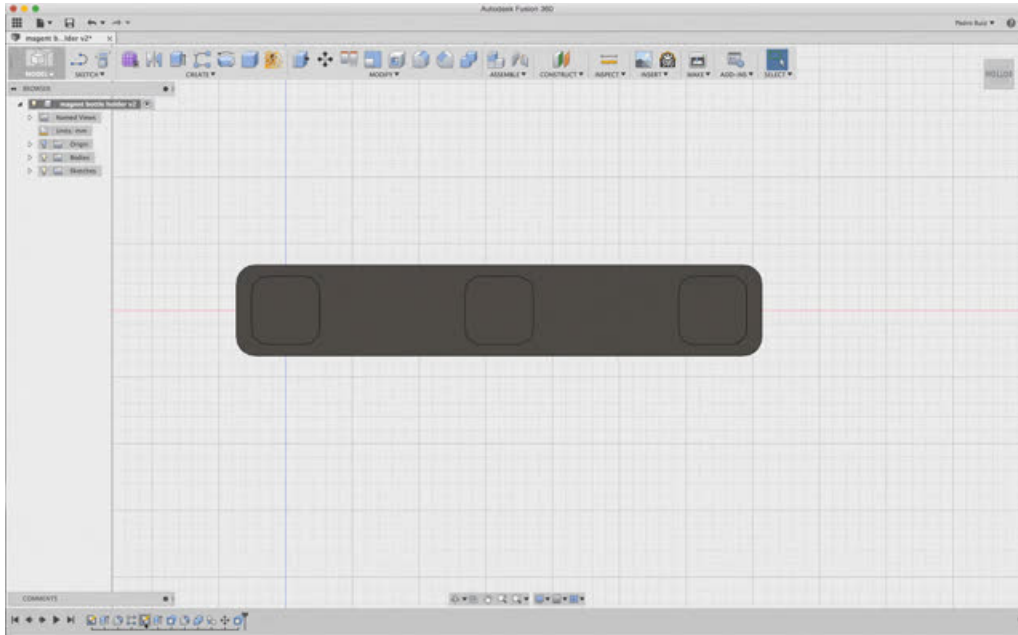
## Resizing Magnet slots

If you need to add or remove magnets, you can edit the slots on the strip by editing the sketches.



## Editing pattern

The pattern and spacing for the slots are adjustable by editing settings in the timeline.



## Resizing strip

The length of the strip is adjustable by editing the sketch dimensions in the timeline.

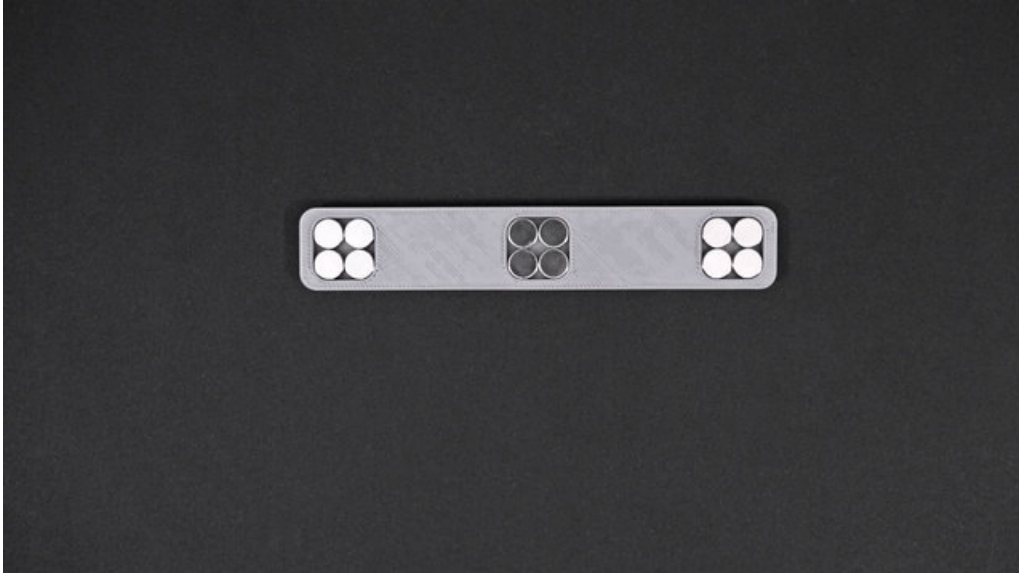
## Filament Materials

We recommend using PLA material to reduce wrapping while 3D printing. The parts can be printed in different types of filament, such as ABS, PET or Nylon.

## Tolerances

The slots for the magnets were designed for .4mm nozzles, so they may have different tolerances depending on your printer. Test the tolerances by printing a test with a single groove and inserting the magnets. If the magnets don't fit into the slots, you may need to use a craft knife or filing tool to loosen the area. If it's too loose, you can use E6000 adhesives to permanently hold the magnets in place.

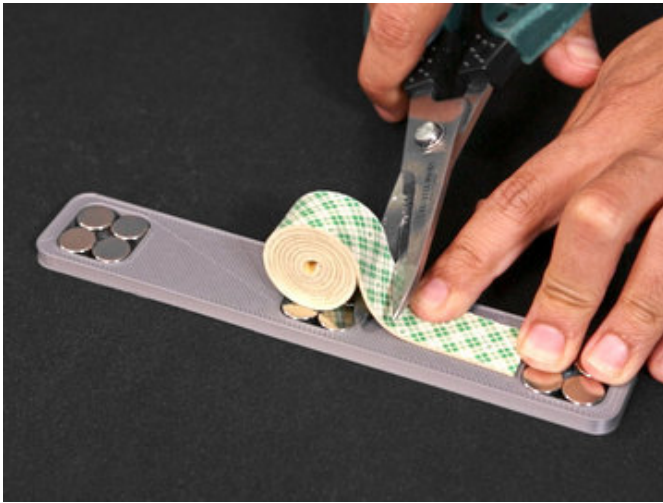
## Assemble



## Assembly

Start by arranging four magnets in a square, then press fit them into the groves.

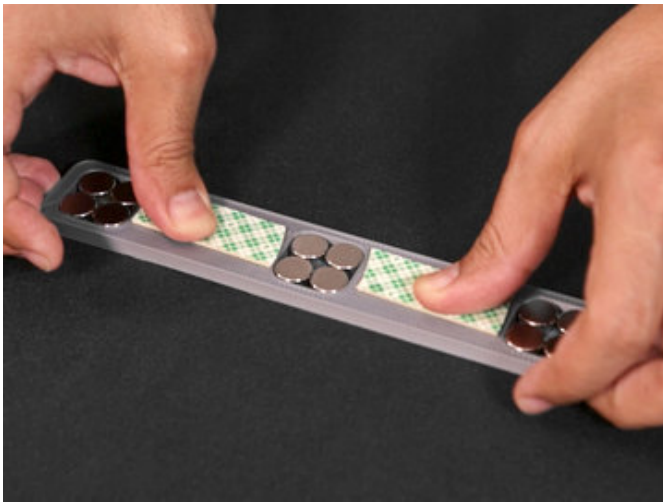




## Add Foam Tape

Measure two pieces of industrial strength foam tape - these go in between the spaces of the groves.

Be sure to apply pressure to the tape so that it adheres well to the 3D printed strip. Use scissors to tape the foam tape to size.





## Position Strip

Find a good spot in the fridge to add the strip, making sure there's enough clearance for different sized containers.

Use a damp paper towel with alcohol to clean the area and wipe away any condensation.

When dry, place the 3D printed strip into place and firmly press on it.



## Save Space!

And that's it, your fridge will be more spacious.

Whether you need space for leftovers or you just like to keep your fridge tidy, this simple project is a great use of 3D printing!