Parametric Kitchen Knife Sheath (Improved Remix)

Bike Cyclist

VIEW IN BROWSER

updated 28. 6. 2023 | published 28. 6. 2023

Summary

Remix of Parametric Kitchen Knife Sheath by bikecyclist and vorpal (Steve Pendergrast) Should work for any knife that...

Household > Kitchen

Tags: customizable customizer gift kitchen knife knifesheath openscad parametric sheath thingiverse

Remix of Parametric Kitchen Knife Sheath by bikecyclist and vorpal (Steve Pendergrast)

Should work for any knife that is pointy at the end. (For non-pointy knives, guesstimate the length the blade would have if it had a point.)

There is an option to provide the sheath with "windows" so you can easily tell if the knife is serrated and has the shape you are looking for without unsheathing it. These windows are on alternate sides of the sheath to facilitate cleaning.

Update 29 June 2023:

- Now supports bottom wall thickness different from overall wall thickness (Thanks to Michał for the suggestion!)

Update 1 June 2020:

- Now supports negative grip cutoff angles (Thanks to prb333 for the suggestion!)

Update 23 May 2018:

Fixed a bug with windows in thick walls, as suggested by Laurie - thanks! :-)

- Improved use of customizer interface
- Improved handling of sheath windows at large grip cut-off angles

Print instructions

Notes:

- For non-pointy knives, guesstimate the length the blade would have if it had a point.
- If bed adhesion is good, print without brim.
- If your knife is longer than the width or length of the bed, remember to check if you can print it diagonally.

Instructions

Feed in the length, maximum width, and thickness of the blade (in mm) into customizer to generate a custom knife sheath. You can also specify the wall thickness of the sheath.

The maximum width may be near the handle or may be near the tip depending on the style of blade, so measure carefully. You might want to add another 1 to 2 mm extra to the width and length, and 0.25 mm extra on the thickness. Maximum thickness is usually near the handle.

2 mm works well as the blade thickness for typical medium sized kitchen knives. Calipers are helpful here. If you're using thin walls for the sheath, they are a bit flexible, and the optional ridges can help to ensure a snug fit.

Remix Information

An interesting remix that allows you to match the actual shape of the blade very closely (with a bit more effort in customizing) is the >>"Parametric" knife sheath (Sabatier profile)<< by davidhbrown:

https://www.thingiverse.com/thing:3834068 by https://www.thingiverse.com/davidhbrown/about

Category: Kitchen & Dining

This remix is based on

Parametric Kitchen Knife Sheath (Remix)
by Bike Cyclist

Parametric Kitchen Knife Sheath (Improved Remix)
by Bikecyclist

Model files

kitchen_knife_sheath.stl

parametric_kitchen_knife_sheath_v6.scad

parametric_kitchen_knife_sheath_v5.scad

parametric_kitchen_knife_sheath_v4.scad

Find source .stl files on Thingiverse.com

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