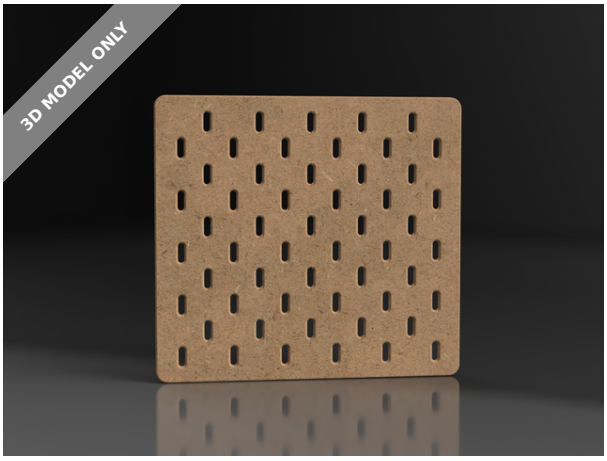


Parametric SKADIS Board Generator

Line Arc Line

VIEW IN BROWSER

updated 10. 4. 2023 | published 10. 4. 2023

Summary

Open in Fusion 360 to generate whatever IKEA SKADIS dimensions you need!

Household > Office

Tags: parametric ikea modular dimensions fusion360 pegboard skadis dummy

I saw a few models on here for printable SKADIS pegboard and I love the idea. However, many of the models were dimensioned wrong for my printer or intended purpose. I decided to make a simple to edit, parametric file for generating whatever SKADIS size you need. You can also export the perimeter lines as a DXF for laser cutting and CNC work using the “Exportable DXF” sketch.

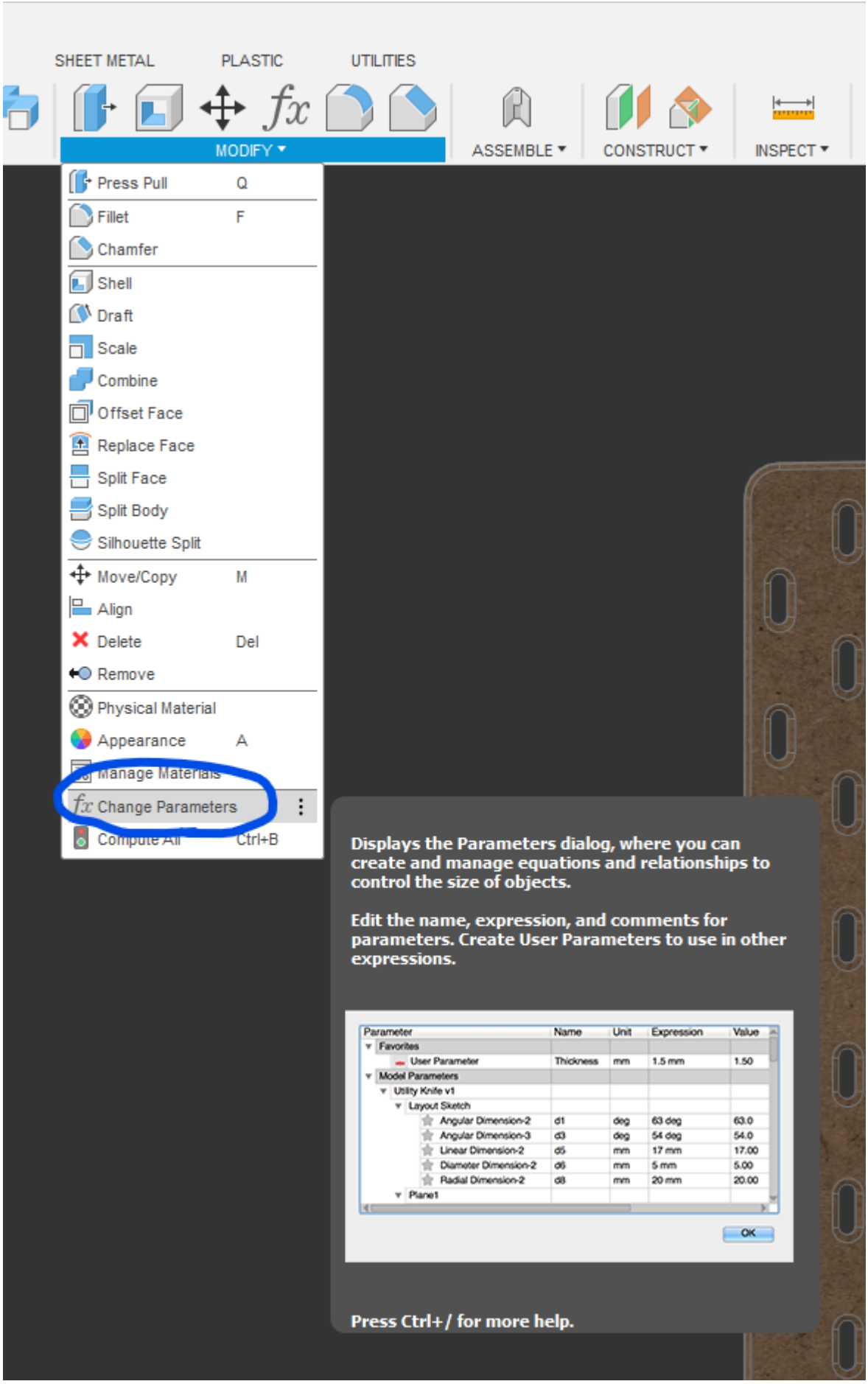
Everything you need to edit exists in the **Parameters menu**.

The “favorited” entries are the driving dimensions:

- Columns
- Rows
- SpacingFromSide

- SpacingFromTop
- BoardThickness

The remainder of the variables like thickness, spacing, and fillet sizes are also named and editable.


SHEET METAL
PLASTIC
UTILITIES
MODIFY
ASSEMBLE
CONSTRUCT
INSPECT
Press Pull Q
Fillet F
Chamfer
Shell
Draft
Scale
Combine
Offset Face
Replace Face
Split Face
Split Body
Silhouette Split
Move/Copy M
Align
Delete Del
Remove
Physical Material
Appearance A
Manage Materials
Change Parameters
Compute All Ctrl+B
Displays the Parameters dialog, where you can create and manage equations and relationships to control the size of objects.
Edit the name, expression, and comments for parameters. Create User Parameters to use in other expressions.
Parameter Name Unit Expression Value
Favorites
User Parameter Thickness mm 1.5 mm 1.50
Model Parameters
Utility Knife v1
Layout Sketch
Angular Dimension-2 d1 deg 63 deg 63.0
Angular Dimension-3 d3 deg 54 deg 54.0
Linear Dimension-2 d5 mm 17 mm 17.00
Diameter Dimension-2 d6 mm 5 mm 5.00
Radial Dimension-2 d8 mm 20 mm 20.00
Plane1
OK
Press Ctrl+/ for more help.

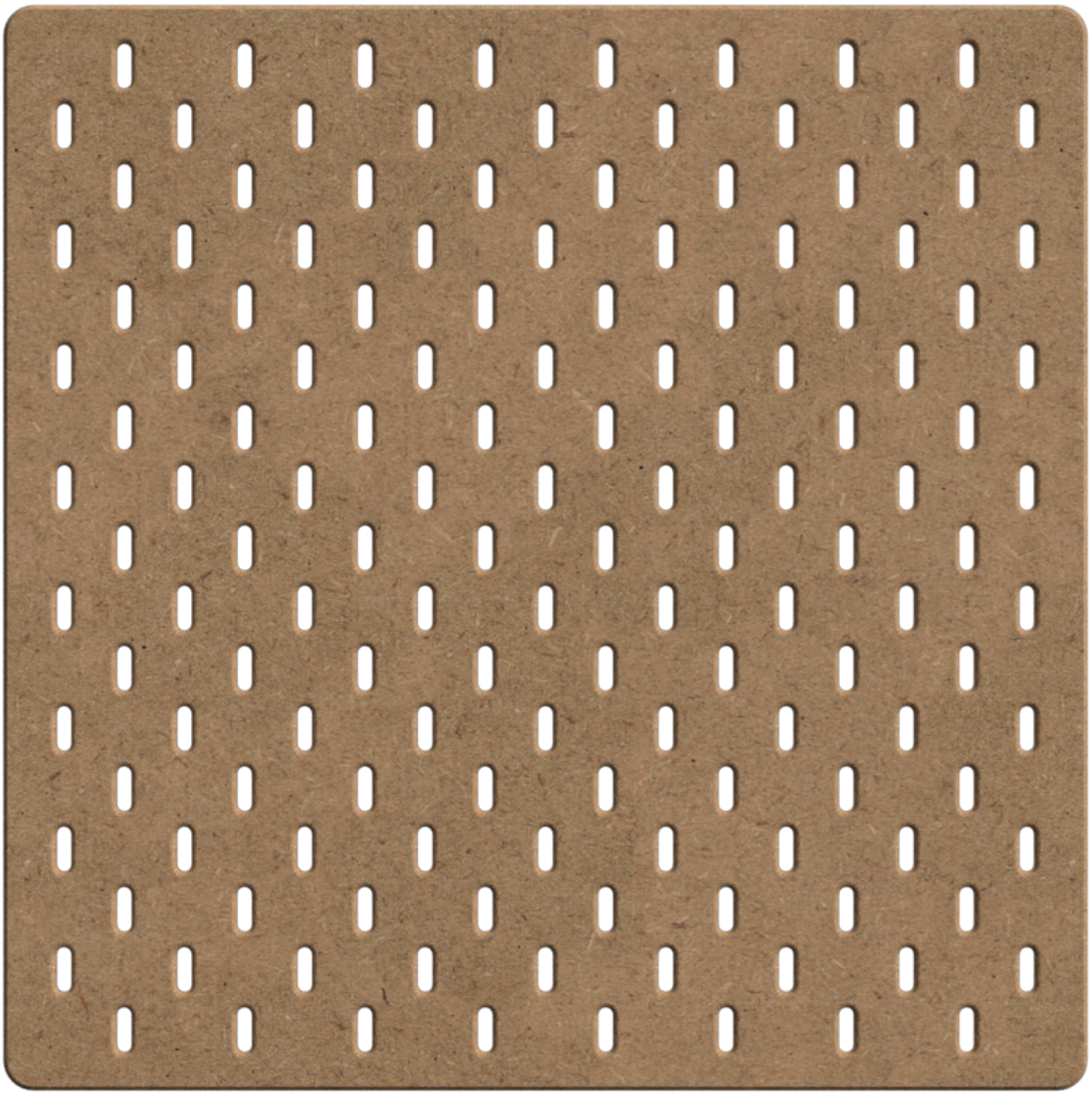
Parameters

Parameter	Name	Unit	Expression	Value	Comments
Favorites					
Printable SKADIS v17.Hole...	SpacingFromSide	mm	HorizontalSpacing	20.00	DRIVING
Printable SKADIS v17.Hole...	SpacingFromTop	mm	VerticalSpacing	20.00	DRIVING
User Parameter	Columns		17	17	DRIVING
User Parameter	Rows		17	17	DRIVING
Printable SKADIS v17.Boar...	BoardThickness	mm	5 mm	5.00	DRIVING
User Parameters					
User Parameter	TotalSpacingHorizontal	mm	HorizontalSpacing * 2	40.00	
User Parameter	TotalSpacingVertical	mm	VerticalSpacing * 2	40.00	
User Parameter	IterationsVerticalFirstRow		ceil(IterationsVertical)	9	
User Parameter	IterationsVerticalSecondRow		floor(IterationsVertical)	8	
User Parameter	IterationsHorizontalFirstColu...		ceil(IterationsHorizontal)	9	
User Parameter	IterationsHorizontalSecondC...		floor(IterationsHorizontal)	8	
User Parameter	ResultingBoardWidth	mm	(TotalSpacingHorizontal * IterationsHorizontal - HorizontalSpacing) + (2 * SpacingFromSide)	360.00	
User Parameter	ResultingBoardHeight	mm	(TotalSpacingVertical * IterationsVertical - VerticalSpacing) + (2 * SpacingFromTop)	360.00	
User Parameter	Columns		17	17	DRIVING
User Parameter	Rows		17	17	DRIVING
Model Parameters					
R-Pattern1-uCount	IterationsHorizontal		Columns / 2	8.5	
R-Pattern1-vCount	IterationsVertical		Rows / 2	8.5	
Linear Dimension-5	d28	mm	40.00 mm	40.00	
Radius	HoleFillet	mm	2 mm	2.00	

OK

The file also supports uneven numbers of rows/columns!

Here is an example of a board with 17 columns x 17 rows. Perfect size to print on a Prusa XL!



If you find this useful, please consider leaving a tip! (Using the coin button at the top)

V29 Update (Sep 21 2022):

I re-worked the file and added a couple things:

- The skadis board now exists in a separate component for easier remixing
- I beveled the outer edge to make it a little more friendly
- I named some steps for easier parsing
- There is now a sketch called “Exportable DXF” for laser cutting and CNC work.

V32 Update (Sep 23 2022):

I did some work in the file to clean up some steps and make measurement more accurate.

- I made the origin the center of the board, not the upper-left corner. This also subtracts an unnecessary sketch from the file. (no more center-finder sketch)
- The fillet radius for the corners has been named and now reflects the 9mm fillet that the IKEA production skadis boards have instead of the 10mm fillet from the previous version.

V35 Update (Dec 5 2022):

- Fixed a finicky sketch (Rounded Outer Edge)
- Showed outer dimensions by default

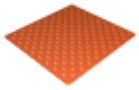
Model files

printable-skadis-v38.f3d

The Fusion 360 file used to make your own Skadis Pegboard!

prusa-mk3s-bed-size.stl

This is a good size to print on the Prusa Mk3S+



prusa-xl-bed-size.stl

This is a good size to print on the Prusa XL

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