

DAN A4-SFX Window Kit Custom Plexiglass Design

Introduction

I wanted to share how to create your own custom plexiglass designs for the DAN A4-SFX Window Kit.

We will use the template Dan has provided on his website and modify it with own design, export it to a DXF file and finally upload it to a lasercutting company.

Prerequisites

Autocad Fusion 360

Go to <https://www.autodesk.com/products/fusion-360/students-teachers-educators>

Follow the three steps to create your account: create your account and choose any educational institution and a believable enrolment and graduation date, click “register” (no additional steps needed here) and finally download the software. The software is available for Windows and macOS.

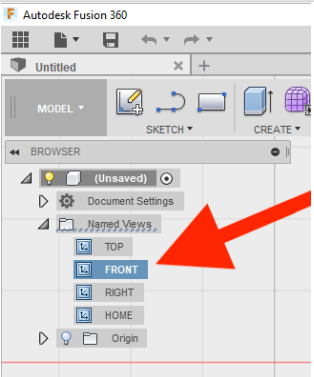
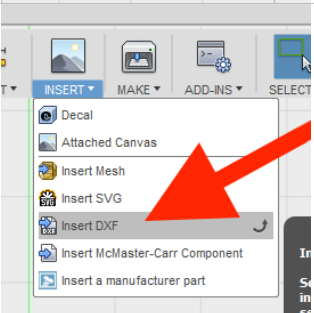
Dan's Template

Download Dan's plexi glass template from his website: https://www.dan-cases.com/dana4_faq.html

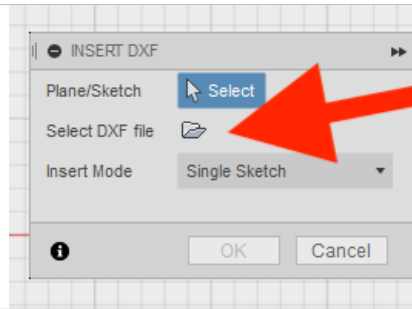
Design / vector image

Either create your own design or import an existing design into Autocad Fusion 360. For the purpose of this howto I'll show you how to import an SVG file.

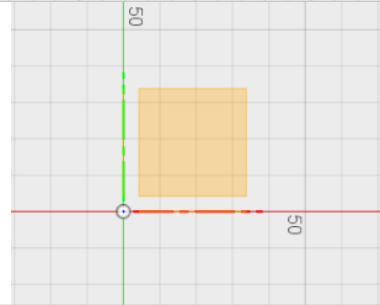
Import and modify Dan's template

<p>Open Autodesk Fusion 360 and create a new blank file and choose “FRONT” from the named views option</p>	
<p>Now choose “Insert DXF” from the insert menu.</p>	

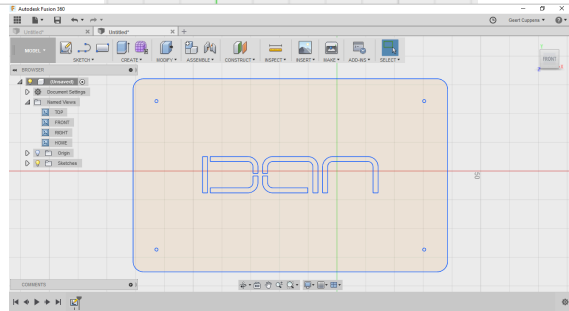
Choose the “open” icon and browse to the template you downloaded from Dan’s website.



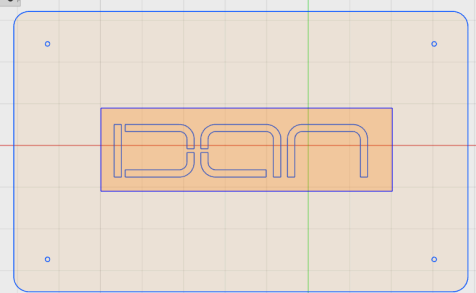
Now click the orange plane selection zone.



Press ENTER to place the imported design to the selected plane.

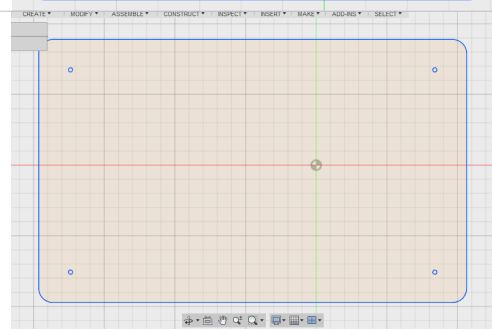


Now press ESCAPE and select the DAN logo.



Press DELETE to remove the logo.

You now have a new empty template to start your design from. Feel free to save this design as a starting point for future designs.



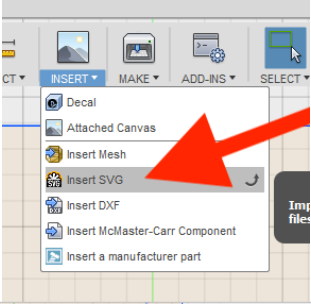
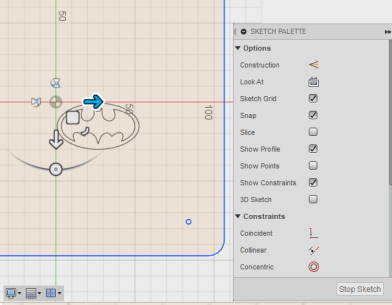


Import your own design

We'll import an SVG into the new empty template.

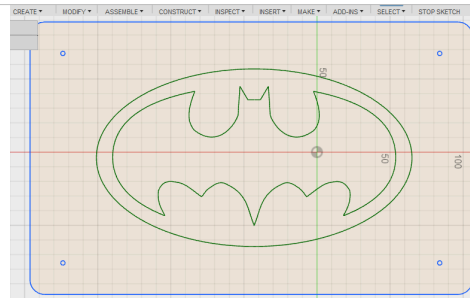
PNG, JPG or GIF files are raster or bitmap image file formats. A raster image is made up of a fixed number of pixels that form a complete image. These images cannot be enlarged without distortion occurring. (When you zoom in on a raster image, the pixels become visibly grainy.)

A SVG (Scalable Vector Graphics) file is a vector image file format. A vector image uses geometric forms such as points, lines, curves and shapes to represent different parts of the image as discrete objects. These forms can be individually edited. A vector image remains crisp and clear at any resolution or size.

For this tutorial we'll be using a Batman SVG logo, which is freely available to download, for example: http://logos.wikia.com/wiki/File:Batman_logo.svg (right click and choose "save as")

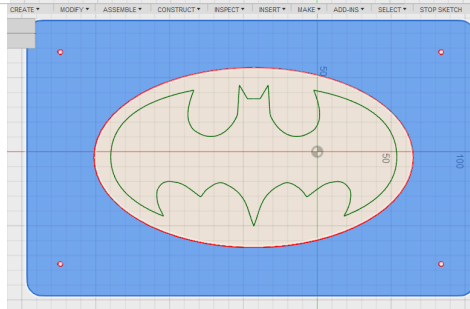
<p>Choose "insert SVG" from the insert menu and browse to your SVG file.</p>	
<p>Choose the orange plane selection zone and place your design, do not press ENTER yet.</p>	
<p>Now use the small arc to resize your design. Since we're using a vector image, the quality will be preserved.</p>	
<p>Use the square to reposition your design.</p>	

Press ENTER when you're happy with the size and the position of your design.

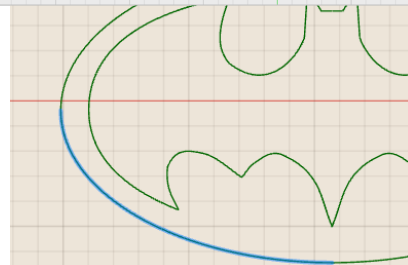


All visible lines on the design will be lasercut, so we need to make sure the cutout is valid. In this batman logo example we'll end up with just a ellipse, since there is no connection between the batman logo and the rest of the panel.

You can verify this by clicking inside the panel close to the outer edge. The blue selection is what the panel will look like.

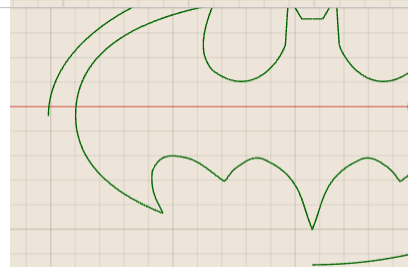


We'll need to make changes to the logo. In this example we'll remove the outer ellipse of the logo. Click on the outer ellipse to select the line.

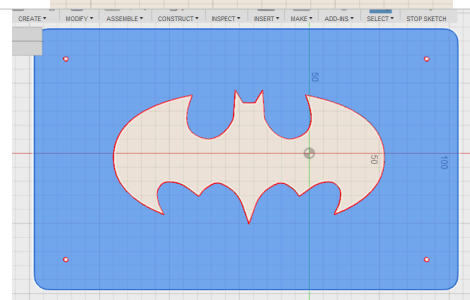


Now simply press DELETE.

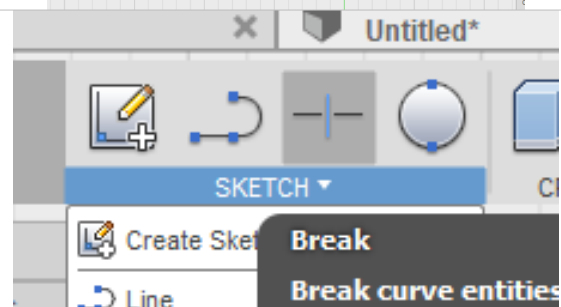
Repeat this for all lines of the ellipse.



Now click inside the panel close to the edge again to verify what the panel looks like.

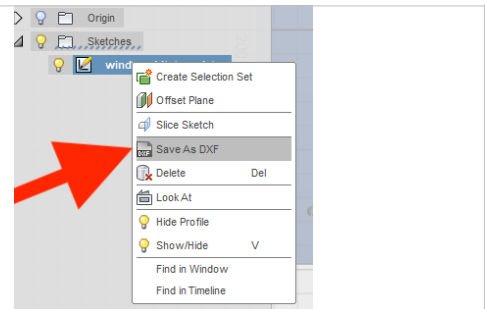


Feel free to add extra lines or modify existing lines via the Sketch toolbar. You can use the Break tool to break existing lines and attach them to other lines to connect floating parts of your logo that would otherwise just be cut out and not attached to the panel.



Export design as a DXF file

Right click the sketch “Window_kit_template” from the “Sketches” menu from the browser and choose “Save as DXF”.

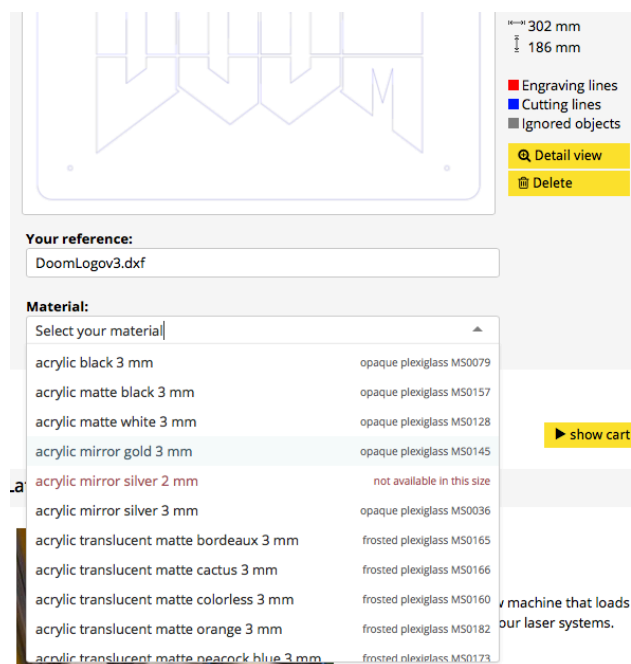


That's it 😊

Upload your DXF file to a lasercutting company

Now you can provide your DXF file to a company that lasercuts acrylic plexiglass. Choose any material they have as long as it is 3mm thick. This is the same thickness as the original plexiglass part of the Window Kit and will fit the sidepanel like a glove.

I'm not affiliated with snijlab.nl, but I had good experiences with their webshop and the preview functionality. They're not that expensive and they ship internationally.



Thanks

Special thanks to Dan for the best case ever. period.

Also thanks to the happy bunch over at [H] - don't hesitate to show your designs here: <https://hardforum.com/threads/dan-a4-sfx-the-smallest-gaming-case-in-the-world.1799326/>

Feel free to contact me on [H] <https://hardforum.com/members/sldr.299034/> or via email shaidar@gmail.com