FABRICATION GUIDE FOR COMMUNITY OWNED CNC FURNITURE

Please find attached all the design files, there are DXF versions of each, all based on a nominal 18mm (3/4") thickness of sheet material.

These will need to be scaled to suit your material using the scaling tool at the following link:

https://cnc-furniture-adjuster.streamlit.app/

Generally for friction fit furniture we recommend setting the "Customise the fit" slider to "Slightly loose". There are ⓘ symbols to help answer any questions about the options.

Avoid splitting parts across different sheets as the thickness scaling might cause the friction joins not to fit!

Also take care when cutting multiple versions of the same item not to mix of parts that have been scaled differently.

Line formatting

Within the DXF files the colour coding is as follows. (These should be identifiable as layers in the dxf and illustrator files, depending on your software.)

RED: Outside cut, all the way through

BLUE: Inside cut, all the way through

GREEN: Rebate - various depths depending on layer title (Library and Hedgehog House only)

Take care when cutting the library! The file includes several pockets of different depths (on separate layers). It also includes a polygon for the library window to take a acrylic/polycarbonate/PETG window, adjust to suit material thickness if needed).

Within the package of files there are both the original design files and "dogbone" files. These "dogbone" files have been designed for an 8mm compression cutter (5/16"). The dogbones have been drawn oversized (8.5mm) to allow the file to be scaled for use with sheet material as thin as 17mm (11/16") without modification. If you are using a significantly larger cutter you may need to use the original design files and add you own dogbones.

This work is the result of a collaborative project between ourselves (WeCanMake, a CIC in Bristol, UK) and Better Block (a nonprofit in Dallas, USA).