PREPARE FILE

Software: Inkscape (free), Illustrator or similar programs for vector graphics.

File settings:

- Paper size: 600 x 400 mm (laser cutter dimensions: 610 x 460mm)
- **Cut**: no fill, solid color, line width 0.02 mm
- **Engraving**: filled areas and lines 0.2 mm and thicker.
- Double check the lines for cutting! Width 0.02 mm!
- Save as PDF

Whenever you can, instead of **raster** engraving try **vector** engraving - it is much faster!

Find detailed guides in fablab's website

copenhagenfablab.dk

PREPARE LASER CUTTER

- Remove dirt and material pieces in the honeycomb grid and inside the machine - THESE CAN CAUSE A FIRE!
- TURN ON THE FUME EXTRACTOR (Find the switch in the small hallway between laser and woodshop)
- Turn on the GREY MOTOR placed on the floor next to the right laser
- ADJUST THE **HEIGHT** OF THE LASER CUTTER BED (**do this every time you change material**)
  - Press FOCUS
  - Take the MANUAL FOCUS TOOL and put it on the carriage pins
  - Press UP or DOWN until the tool tip touches the surface of your material
  - Remove the MANUAL FOCUS TOOL and put it back where you found it
  - Press RESET (whenever you press RESET it shows the current HOME position and the JOB list of files)
- ADJUST THE **HOME** POSITION if necessary (HOME is the top left corner of the canvas in your file)
  - Press POINTER to turn on the red LED dot that shows where the laser will hit
  - Press X/Y OFF
  - Press GO
  - MOVE laser head WITH YOUR HAND to desired position (avoid touching mirror and lens)
  - Press SET HOME to lock
  - Press RESET to see the JOB list

CUT & ENGRAVE

- Open the PDF in Adobe. Print the file with the laser cutter's printer driver "Epilog Engraver".
- Print in "Actual size", orientation = "Auto"
- Adjust the settings for vector/raster. In "advanced settings" you can find pre-defined settings for specific materials. Also look at the samples we have in the fablab.
- Select **PRINT** to send the file to the laser. If the file name does not appear in the laser cutter's display, try moving the laser cutter's USB to a different port of the computer.
- It is always a good advice to **make a test** to check that the selected settings will cut/engrave as expected.
- when you see your file name and the FUME EXTRACTOR is working - press **GO** (green button) to start

!!! YOU HAVE TO STAY IN THE ROOM TO OBSERVE THE LASER CUTTER WHEN IT IS RUNNING !!!

CLOSE DOWN

- Turn off the laser cutter
- Turn off the GREY MOTOR next to the right laser
- Turn off the FUME EXTRACTOR
- Remove dirt and material pieces in the honeycomb grid and inside the machine