

# Laser Cutter: Rules

## **1. Always be there.**

*There are no exceptions to this. When its cutting, you're nearby, you have an eye on it.*

## **2. Absolutely no PVC / vinyl**

*The laser cutter can only cut some materials, and some of those materials such as MDF should be avoided as they aren't so good for the filter.*

*However, cutting PVC will kill you: chlorine gas.*

## **3. Dab for airflow before every run**

*The laser cutter can only cut if the smoke is kept away from the mirrors and lenses. Running it with the ventilation compromised will clog it up. So before EVERY RUN dab your finger under the cutter head to check for suction.*

## **4. No obstructions on cutter head**

*Don't place anything on the cutting bed that the cutting head could hit. And check this before even hitting print on your PDF.*

## **5. BYO material**

*Just because something is in the workshop, doesn't mean its yours to cut*

# **Laser Cutter: Operation**

## **1. PDF Drawing and USB Memory Stick**

*Red Lines 0.1mm thick will cut*

*Blue Lines 0.1mm thick will engrave*

*Anything else will 'raster engrave', like a printer.*

## **2. On Cutter: place material, power on twice**

*Ensure the material is flat. Masking tape it down rather than putting anything on top that the cutter head could hit.*

*Power on the Cutter, power on the ventilation.*

## **3. On Cutter: ensure Z height**

*The bed moves up and down. Getting the height correct is essential for good cutting. Not getting the height wrong is essential for not having the cutter head drive into something and break horribly.*

# Laser Cutter: Operation

## 4. On PC: open in Acrobat and File>Print

Select VLS 6.60 as the printer.

## 5. Set the 'print' properties

Select Material Type

Select Material thickness

Select Fixture Type (None if material flat on bed)

## 6. Hit 'print' and open the Laser Cutter Control

Hit print in the print dialog, and in the background your design will open into the Laser Cutter Control software. You need to double click on the Laser shortcut on the desktop to open this.

## 7. Position Cutting Head

'Focus View' Button

## 6. Position Your Design

'Relocate View' Button, then 'To Pointer'

## 7. Final Cutter Check: dab finger for airflow

Don't skip this. Every time, every iteration of your design.

## 8. Hit 'Play' to start cutting.

Emergency stop: open cutter lid. Otherwise, press pause.

Pressing pause again will resume (good for tweaking power settings). Pressing play again will restart.