

Laser Cutter Type: Full Spectrum Profab 38 x 46

Power: 110 Wt.

Co2 Laser Tube Type: Glass

Software: Retina Engave3D

Location: The object Lab, Room S180

General Rules:

- 1- No types of Metal can be cut on the laser cutter.
- 2- We do not accept reflective materials such as mirror or stainless steel for cutting or engraving.
- 3- Always have extra material to test speed and power for your material.
- 4- Laser bed is 36x48", but it is advisable to leave some margins.
- 5- Your files should be ready to go in adobe illustrator (vector based), PDF or Rhino(3DM). In case of images, the software converts them to bitmap. The monitors are not responsible for preparing your files.
If you are not ready, the next appointee present will take your spot.
- 6- Please look at the following pages for the list of materials that are allowed and Prohibited.

Material	Application	Note
Metal		
Plain Carbon Steel	Engrave	
Anodized Aluminum	Marks White	
Steel	Engrave	
Plastic		
Acrylic (all types)	Cuts/Engrave	
Polycarbonate	Not recommended ❌	Example are PC and LEXAN plexi. Fumes are dangerous.
PVC	Not allowed ❌	Contains Chlorine
Delrin®(POM, acetal)	Cuts/Engrave	
Polyethylene film	Cuts/Engrave	
Mylar®	Cuts/Engrave	Mirrored Mylar is not allowed.
Polyurethane	Cuts (rough)	
Carbon Fiber	Not allowed ❌	
FR4(PCB/Circuit Board)	Not allowed ❌	
UHMW / HDPE	Cuts/Engrave	Melts Badly- Only 1/16" or thinner is allowed.
Polypropylene (PP)	Cuts/Engrave	
Styrene	Not allowed ❌	
PETG	Cuts/Engrave	
Vinyl	Not allowed ❌	Contains Chlorine
Any material that contains Chlorine	Not allowed ❌	
Fiberglass	Not allowed ❌	
Rubber		
Low Odor Rubber	Cuts/Engrave	
Silicone	Cuts/Engrave	
Vulcanized Rubber	Cuts/Engrave	
Wood/paper		
Baltic Birch/Oak Plywood	Cuts/Engrave	Maximum 1/2" thick
Pine, Poplar, Oak, Holly, Balsa,...	Cuts/Engrave	Maximum 1/2" thick
Cherry Wood	Cuts/Engrave	Maximum 1/2" thick
MDF	Cuts/Engrave	Maximum 1/2" thick
Cardstock/Paper	Cuts/Engrave	
Cardboard	Cuts	Double layer is not allowed.
Clipboard Material	Cuts/Engrave	
Fabrics		
Nylon	Cuts	
Polyster Fabric	Cuts	
Denim	Cuts/Engrave	
Felt/Cotton	Cuts	
Leather	Cuts/Engrave	
Stone		
Marble	Engrave white	Reflective Surfaces are not allowed
Granite	Light Etch	Reflective Surfaces are not allowed
Brick	Light Etch	Reflective Surfaces are not allowed
Agate	Light Etch	Reflective Surfaces are not allowed
Glass		
Colored Glass	Etch White/Sparkly	Reflective Surfaces are not allowed
Clear Glass	Etch White/Sparkly	Reflective Surfaces are not allowed
Tempered Glass / Crystal	Etch White/Sparkly	Reflective Surfaces are not allowed
Sapphire	Etch White/Sparkly	Reflective Surfaces are not allowed
Ceramics/Concrete		
Earthenware	Light Etch	Reflective Surfaces are not allowed
Stoneware	Light Etch	Reflective Surfaces are not allowed
Porcelain	Light Etch	Reflective Surfaces are not allowed