

LASER CUTTER ORIENTATION

GENERAL

- The small laser is currently running on a 50-watt tube.
- The small cutting area is 299mm x 499mm (11.7" x 19.6")
- The big laser is currently running on a 130-watt tube.
- The big cutting area is 900mm x 1300mm (35.4" x 51.1")

BEFORE YOU CUT

- Check the approved materials list. If you have questions, please ask.
 - This site is a great resource to help choose a material for your project.
 - <http://www.cutlasercut.com/laser-cutting-materials-laser-engraving-materials>
 - <http://www.makercase.com>
- Check the water level in the coolant reservoir. (small laser)
- Check that the machine is empty
- Turn on the laser main power. (Leave the laser tube power off for now)
- Check that the booster fan on the vertical ventilation duct is running.
- Turn on the water and air power. (small laser)
- Confirm that the air assist is blowing.
- Focus your laser.
- Turn on the laser tube power.

CUTTING

- Keep the lid closed.
- You do not need to stay right beside the machine while it is cutting, but you should remain close enough to hear any problems.
- You should check your cut from time to time.
 - It is ok to look into the machine while cutting, but you should not stare into it.
- The machine will beep when done.
- Turn off the laser tube power.
- Make note of the cutting time.
- If you are cutting materials like acrylic that give off unpleasant odors, you may want to keep the lid closed for a minute or two. That will give the fumes time to vent.
- Check your piece to ensure that the cuts made it all the way through.

WHEN YOU ARE DONE

- Remove any loose cut off parts from the laser.
- Turn off the main power switch on the laser.
- Place laser time fees in the box to the right of the laser.

APPROVED MATERIALS

- Woods
 - Hardwoods (Cherry, Maple, Walnut)
 - Medium (Alder, Birch)
 - Soft (Bass, Balsa, Pine)
 - Birch Plywood
 - Cork
- Board
 - Chipboard
 - Matboard
 - Oilboard
 - Bristol
 - Masonite
 - Tagboard
- Paper
- Fabric
 - Wool
 - Felt
 - Silk
 - Canvas
 - Cotton
- Leather
- Suede
- Synthetics
 - Acrylic
 - Plexiglas
 - Mylar
 - Vellum
 - EVA Foam
- Some Restrictions
 - Metals* (Can be marked)
 - Glass* (Can be etched)
 - Rubber* (Laser specific rubber)

PROHIBITED MATERIALS

- Very Reflective Materials*
- Soft foams
- Gels
- Food
- Magnet sheet
- Styrofoam
- Fiberglass
- Carbon Fiber
- Any plastic other than Acrylic or Plexiglas*
- **Polycarbonate**
- **ABS**
- **PVC**
- **VINYL**