Laser Cutter

You must have been trained, certified, and paid the per-semester subscription to use the laser cutter!

Laser Cutter Reservations

Laser Cutter Policies

General

- If you are having EID access problems with the laser cutter systems, contact Technology Desk at 512-471-1189. Only the Technology Desk staff are permitted to give you access to the system. Do not get another student to log in for you or share your EID credentials, as this can result revoking of privileges for both students, as described below.
  - Sharing your EID password is in violation of the university’s Acceptable Use Policy and can have severe consequences, up to and including disciplinary probation, suspension from the university and criminal prosecution.
- Infractions of laser cutter or any other Technology Lab policies may result in privileges being revoked.
- Operating the laser cutter without being trained or paying the subscription for the semester may result in privileges being revoked.
- Operating the laser cutter under someone else’s login may result in privileges being revoked for you as well as for the person who allowed you access to the system. If you are found to be logged into the laser cutter computer with someone else’s credentials, both you and the person who shared their information may have their access revoked for the rest of the semester.
- Use of more than one laser cutter at the same time is only permitted when there is no one on the calendar.
- If you notice that the laser cutter requires cleaning or maintenance, please notify the Technology Desk staff immediately in person or by calling 512-471-1189.

Training and Subscription

- In order to use the laser cutters the student, faculty, or staff must
  - complete laser cutter training AND
  - complete in-person certification with a member of the Technology Lab staff AND
  - pay the per-semester subscription.

Health and Safety

- Although this system uses a CO₂ laser that could damage your eyes or skin with direct contact, it uses both a system of safety interlocks and an IR-absorbing window on the top door, making the laser cutter safe to use without goggles or other safety gear.
  - Please note that the intense light that appears during the engraving or cutting process is the product of material combustion or vaporization. DO NOT STARE AT THE BRIGHT LIGHT or risk damage to your eyes.
  - Additionally, the Red Dot Pointer that appears on the material is just a positioning help, not the laser beam itself, however, DO NOT STARE at the Red Dot Pointer or risk damage to your eyes.
  - Lastly, the machine doors are safety interlocked and will disable the CO₂ laser beam from firing when the doors are opened. The Red Dot Pointer is NOT safety interlocked and can be activated with the door(s) either open or closed.
- Operating the laser cutter in any unsafe way can result in damage caused to the laser cutter, which costs the school money. (For example, a replacement lens for the X-660 costs $230.)
  - Unsafe practices include (but are not limited to):
    - Leaving the laser cutter unattended while it is running.
    - Cutting materials that are not on the acceptable materials list.

Materials

Use of prohibited materials could result in the material melting to the laser cutter bed and/or the release of toxic fumes. Due to the severity in risk, cutting prohibited materials will result in loss of lab privileges and possible fines for damages. Please note that the University Co-op sells material that looks like acrylic but is made of PVC and styrene, and is therefore prohibited.

For more information on materials that can possibly be cut (not all materials listed are approved by SOA Technology), please see http://www.lasercuttingshapes.com/page/materials and contact the SOA Technology office for approval for use on the laser cutters.

Prohibited Materials

- Lexan
- Polyurethan
- PVC
- Styrene
- Polycarbonate
- Vinyl
- Glass
- Foam Core
- Metal

Lime powder MSDS