



Specs

- ULS PLS4.75 laser, 60 watt
- Workspace size: 24in x 18in max
- Rotary: 8in diameter max
- Cut Depth: 1/4in max
- Color Space: RGB
- Accepted Files: AI, EPS, SVG, DXF, DWG

Software

*Software available in Workshop

- Inkscape (Free)*
- Illustrator (Paid)*
- TinkerCAD (Free)*

Contact

Phone : 847-907-3600 ext. 180
Email: workshop@palatinelibrary.org

Lab Hours

- Tuesday-Thursday 12:00 - 6:00 p.m.
- Saturday-Sunday 12:00 - 4:00 p.m.



Scan for more

Laser Cutter

• What is it?

This machine directs a laser through a series of mirrors to help you create patterns and designs by etching, cutting, and engraving custom designs and shapes.

• What can it make?

Since this machine is so versatile, it can help create a wide variety of items including:

- Coasters, Cutting Board, Acrylic and Glass Personalization
- Cutting fabrics and other thin items
- Ornaments and Custom Jewelry
- Cake toppers
- Signs and Decorative art pieces

Our stock fluctuates through a variety of materials:

- 4" wood coasters (square, circle) — \$0.25 each
- 12" x 24" leather like sheet — \$4.00 each
- 1/8" x 12" x 24" plywood sheet, Birch — \$4.00 each
- 1/8" x 8.5" x 12" acrylic sheet, clear — \$5.00 each
- 1/8" x 12" x 24" acrylic sheet, clear — \$10.00 each
- 1/8" x 8" x 24" wood board, Alder — \$12.00 each
- 1/8" x 12" x 24" wood board, Cherry — \$21.00 each
- 1/8" x 12" x 24" wood board, Walnut — \$26.00 each

You can always bring in your own material for use on the machine at no cost, but it has to be approved ahead of time. Most woods/plywood, paper/cardstock, cork, acrylics, and fabrics are okay.

Safe materials for etching include glass, ceramic tile, anodized aluminum, stone/marble/granite, etc.

Additional Resources

One-on-One Appointment

Set up a one on one consultation for your project
<https://www.palatinelibrary.org/services/appointments>

LinkedIn Learning

Access to various online courses to master the skills needed to complete your project
<https://www.linkedin.com/learning-login/go/palatinelibrary>

CreativeBug

Browse various project ideas and courses centered around crafting, sewing, and more
<https://www.creativebug.com/lib/palatinelib>



Sample pictures of etched glass, wood test card, and etched cutting board

● What do I need?

First, you'll need to make or find your design in a vector format so that the laser cutter software can understand it. The next step is to set your design up using the RGB color space:

- **RGB RED** (#FF0000) is for a cut.
- **BLACK** (#000000) is for an etch.
- **RGB BLUE** (#0000FF) is for an engrave/score.



If your project features a cut or engrave, make sure those elements are a stroke line set to 0.1 thickness, the RGB color needed, and with no fill. If you're doing an etch, then set the fill of your design to black or a percentage of gray to bring out detail/depth. There are plenty of ways to adjust existing pictures and designs to prepare them for use with the laser cutter, and we're happy to help you get started.

● Additional Info

NO PVC, VINYL, ABS, HDPE (milk jug/plastic bottle material), FOAMS, FIBERGLASS, or COATED CARBON FIBERS. Any material that cannot be identified or that has a coating/finish that cannot be identified may be denied.

Most of the work on these files are done in the design portion, so take special care with measuring and choosing the right design style for the material you'll be using. A lot of times, contrast is key and less is more on laser projects. We also suggest putting each type (cut, etch, engrave) on their own layer when you're creating your design.

There are many free websites that have designs to choose from like Vecteezy, The Noun Project, Flaticon and many more.

We can't cut metal, but if you'd like to mark metal then we suggest preparing your item with a special laser marking spray like Cermark or LaserBond