

# GLOWFORGE

## Laser Printer



## Materials & Settings

### What Can Be Cut and/or Engraved:

- Wood, including cutting boards
- Acrylic
- Paper
- Cardboard
- Leather
- Glass (flat surface only)
- Tile (such as slate)
- EVA foam
- Draft board
- Fabrics

### Unsafe Materials That Cannot Be Cut or Engraved:

- Painted or treated materials
- Vinyl
- Plastics (other than acrylic)
- Food products
- Electronics
- Mirrors or reflective surfaces
- Artificial leather
- Any material containing chlorine
- Metal\*

### Proofgrade vs Uncertified Material

The Glowforge company sells Proofgrade material that is guaranteed to cut correctly with Glowforge's built-in settings. The Glowforge software refers to any non-Proofgrade material as "Uncertified." As long as the material is safe to use (it is on the "Safe" list, and staff can verify that), **uncertified material can be safely cut and/or engraved.**

### Settings for Non-Proofgrade Material

There are two main settings: **speed** and **power**. Lower speed means that the laser will be more concentrated on each place, and higher speed means it will move quickly over each place. Power is the strength of the beam.

**Members should always bring extra material;** finding the correct settings takes trial and error. While there are base settings for most materials, each piece of material will react differently to the laser (even wood cut from the same lumber may produce different results).

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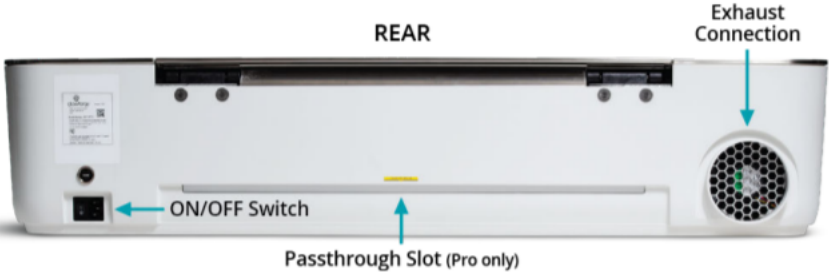
Laser Printer



## Parts Overview



FRONT



# GLOWFORGE

## Laser Printer



## Usage and Safety

### Using the Glowforge

The Glowforge is a staff-operated machine, but we do ask that members remain in the Library while the laser is in use.

The Glowforge is available by appointment. Appointment slots can be reserved online or by calling the Library.

Please arrive at your appointment with:

- **A design:** Design files can be hand-drawn artwork or handwritten words in a single dark color; a vector file; or a black and white image that we will convert into a vector file.
- **Material, and extra material:** Before bringing your materials to the Library, please ensure that your material is approved for use with a Glowforge Laser Cutter. We will verify any materials are safe for use before processing your request. Please visit [www.glowforge.com](http://www.glowforge.com) to view approved materials and project ideas, and <https://glowforge.com/faq/materials-and-uses> for questions about specific materials and uses. Maximum size is 20"L x 12"W x 1/2"H.

At your appointment, a staff member will work with you to complete your project. While staff will be able to estimate the best settings for your project, every material reacts differently to the laser. We cannot guarantee a successful outcome, and we recommend testing the design on your extra material first.

### Safety

It is extremely important that only trained staff members operate the laser. Please do not touch the Glowforge, as many parts are very delicate and can easily cause damage if handled improperly. If a project is deemed unsafe for any reason, staff may end the appointment.

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## FAQ

### **What can I make with the Glowforge?**

There are so many possibilities! Some popular projects include engraved wooden cutting boards, wood and leather jewelry, and embossed leather journals. We recommend visiting the Glowforge website ([www.glowforge.com](http://www.glowforge.com)), Glowforge social media, Pinterest, and Instructables ([www.instructables.com/workshop/laser-cutting/projects/](http://www.instructables.com/workshop/laser-cutting/projects/)) for project ideas.

### **What do I need to use the Glowforge?**

An appointment, a design, and material. We **strongly recommend** bringing extra material, since finding the right settings often takes trial and error.

### **Why do you recommend bringing extra material?**

Every material reacts differently to the laser, and will require different settings for the right outcome. Because of slight variations, even two pieces of wood cut from the same lumber will react different to the laser. Testing your design on spare material first will help us to adjust the settings if needed.

### **How detailed can the design be?**

The laser is approximately the width of a human hair, which allows it to cut very precise designs. However, if a design is very detailed, the file format must be a vector file for the best outcome. While other file formats are compatible with the software, some quality might be lost.

### **How long does a project take?**

This can vary from two minutes to two hours! Small, simple projects can be completed quickly, while larger or more complex designs can take over an hour. For example, a 14" x 10" cutting board engraved with a last name and simple floral design in the corners will usually take approximately one hour (depending on material and design).