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Thank you for your interest in Laser Edge!

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## Custom Laser Cutting - About the Tool

Q. What is laser cutting?

A. Laser cutting is a method of manufacturing that utilizes a thin laser beam to cut parts designed in CAD from a number of materials.

Q. What is laser engraving?

A. Laser engraving is similar to laser cutting but is done at higher speeds, lower power, and only takes a thin layer off the top of the material rather than cutting through. The detail is up to 1200 dpi, and the laser will process colors as shades of gray - meaning that it will vary the depth of engraving depending on the color, allowing the engraving of things such as photographs on many materials.

Q. What materials can the laser cut?

A. The laser can cut through most organic materials and plastics. The thickness is limited to about 3/8" in light wood, such as balsa, and 1/4" in hard woods. The laser can cut through 3/8" acrylic. **THE LASER CAN NOT CUT THROUGH METAL OR CARBON.** Please see page 3 of this brochure for a list of our standard materials.

Q. What materials can the laser engrave?

A. The laser can mark on any material that it can cut, plus many more. Please contact us if you have a question about a specific material.

Q. What size material can the laser process?

A. Our laser has a bed size of 24" x 18".

Q. What is the kerf (width of the cut) of the laser?

A. The kerf varies with the material density and thickness. The variation is from as little as 0.004 inches (1/32" balsa) to as much as 0.010 inches (1/8 inch birch ply). Generally speaking, two parts that are designed to have the same dimension, for example a tongue and groove, will have a tight clearance fit after cutting.



## Custom Laser Cutting - Getting a Quote (CAD)

Getting a free quote from your CAD drawings is easy. All that we ask in return for the free quote is that your files meet our setup requirements. Please note that we have a minimum order of \$50.

Q. What formats do you accept?

A. The CAD drawings can be provided in standard CAD formats (dxf, dwg) or in vector graphics formats (cdr, ai).

Q. How should the files be setup?

A. The parts should be laid out with each material type and thickness on its own layer. Text to be engraved should be on its own layer called "engrave." If you would like the parts to be left in the sheet, please add 3 to 4 hold-in tabs around each part (0.07 works quite well). Please see the sample files on our laser cutting page:

[www.laseredgecutters.com/lasercut](http://www.laseredgecutters.com/lasercut).

Q. How do I submit files for a quote?

A. For files less than 2MB in size, please upload your files via the form on our laser cutting page: [www.laseredgecutters.com/lasercut](http://www.laseredgecutters.com/lasercut) (the form is at the bottom of the page). For files greater than 2MB, please submit the file by email to [sales@laseredgecutters.com](mailto:sales@laseredgecutters.com). If you have more than one file, please zip the files into an archive and submit the zip file.



## Custom Laser Cutting - Standard Materials

### Materials:

Listed below are some of the more popular materials that we either carry in stock or can have on hand quickly for your custom order. Non-stocked widths are available upon request.

### Stock Materials:

Wood	Length	Width	Thickness
Balsa	24"	3" & 4"	1/32", 1/16", 3/32", 1/8", 1/4"
Birch Ply	24"	12"	1/64", 1/32", 1/16", 1/8"
Lite Ply	24"	12"	1/8", 1/4"
Basswood	24"	3"	1/32", 1/16", 3/32", 1/8", 1/4"
Depron	24"	18"	2, 3, and 6mm

### Other Materials Available Upon Request:

E = Engrave/Mark C = Cut

Woods	Plastics/Rubber	Other
Poplar (up to 1/4") [EC]	Acrylic (up to 3/8") [EC]	Paper [EC]
Oak (up to 1/4") [EC]	Delrin [EC]	Mat board [EC]
Cherry Veneer (up to 1/4") [EC]	Mylar [EC]	Cloth [EC]
Maple Veneer (up to 1/4") [EC]	Rubber [EC]	Leather [EC]
Walnut Veneer (up to 1/4") [EC]		Fiberglass [EC]
		Coated Metals [E]
		Painted Metals [E]
		Anodized Aluminum [E]
		Ceramics [E]
		Marble [E]

\*Materials that we cannot work with include PVC, Vinyl. Metals can be marked but not cut