

Instructions

PREPARATION AND TIPS FOR CUTTING AND TRANSMITTING FILES

CAD Files

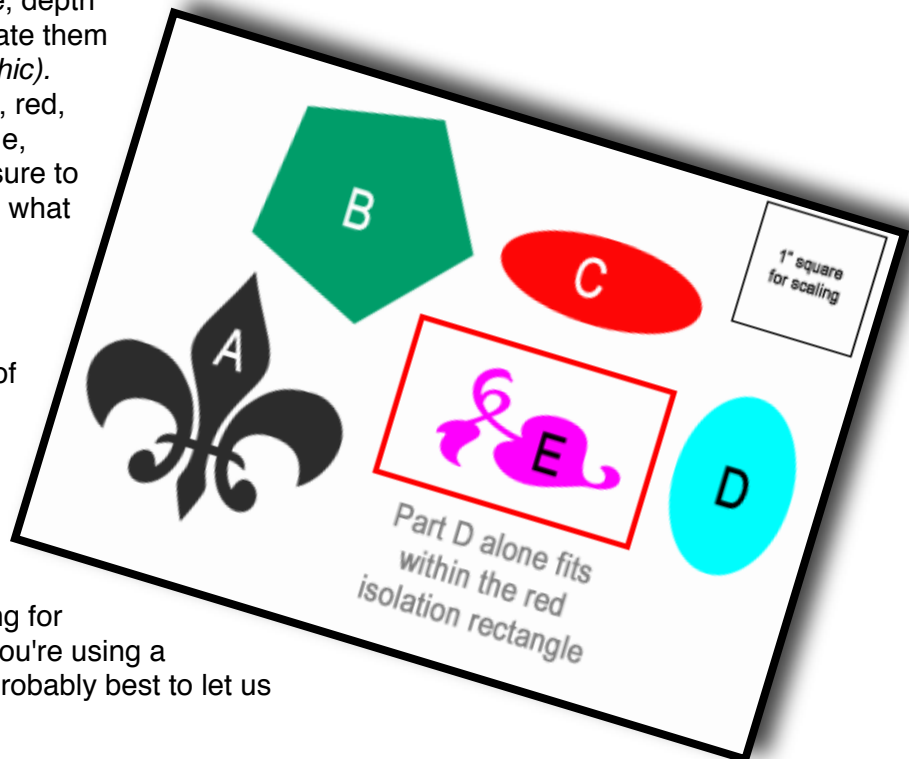
Our preferred file format is Corel Draw (version 12 or older). Other workable formats include *.dwg (any version) and *.dxf (2002 or older) -- we can handle other file formats, but please inquire before you send them.

To ensure that your drawing is properly scaled by our system, we recommend placing a 1 (one) inch square somewhere on the drawing labeling it "1 inch square for scaling" (*see graphic*). In the alternative you can place a few dimensions on various parts, though you do not have to label the dimensions of everything. One or two is sufficient and recommended -- any more than that might delay our setup time.

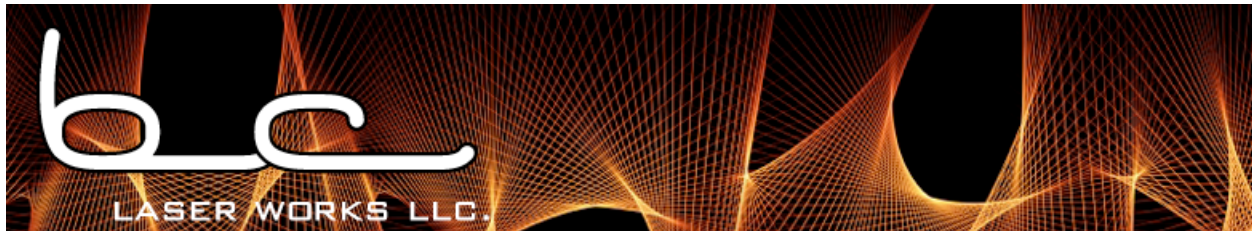
If you have different cutting requirements (for example, depth cuts or score lines), illustrate them a different color. (*see graphic*). The best colors are: black, red, green, cyan, magenta, blue, yellow (in that order). Be sure to give some indication as to what each color means.

Nesting

Nesting is the placement of multiple parts (or multiple copies of the same parts) on a single sheet for cutting. Some customers prefer to nest their own parts, but we generally do the nesting for most customers. Unless you're using a full sheet (48" x 48"), it's probably best to let us nest your parts.



If you have multiple parts, you can include them all in the same drawing file. When doing this, leave sufficient white space around the (part) drawing, so we are able to isolate the part using a selection rectangle (*see graphic*). To be clear, we need to be able to draw a rectangle around the part where only the entirety of the part is enclosed by the rectangle.



This will make it easier for us to select each part for nesting purposes. You do not need to "group" the various components of a part (for example the outline and any holes cut in the part).

Cutting Considerations

The width of the laser beam is about 0.007". It varies a little depending on the thickness and composition of the material, but 0.007" is a good average. The laser will follow the lines you've drawn meaning a little will be taken off each side. This matters if you need precise sizes. For example, if you wanted a hole that was exactly 0.250" in diameter, you'd have to draw it a little small (about 0.246") because the width of the beam will oversize the hole a little. On the other hand, if you wanted a circle that was exactly 1.000", you'd have to draw it a little big (about 1.004") because the laser will undersize the part a little. Rule of thumb: Holes are oversized, parts are undersized.

Transmitting your files

You can email your files to josh@bclaserworks.com.

Files for Engraving

When sending us files to be engraved, we can handle *.gif, *.jpg, *.tiff, *.bmp, *.png, and other formats. We typically engrave at 250 dpi, so your image should be at least that resolution. Don't worry about sending us a huge file -- our email system can handle it.

Pictures should be high contrast meaning the darks are highly saturated (real dark) and the lights are real light. There should also be a strong contrast between the subject and the background. Laser engraving is a low contrast process, so starting with a good picture is important. The coloring of the picture isn't important because we turn the picture into a gray-scale image before engraving it. It's the contrast that's important.

When you send us the picture, be sure to indicate what size you want the final engraving. Also, let us know if we're supposed to delete the background, crop the picture, or do any other processing of it before engraving. We are happy to comply with your special instructions so please be specific.

If you want to physically mail us a picture for engraving, or a drawing for cutting, you can send it to the address shown on the bottom of the page.

Paper Drawings

If you can't send us CAD files, we can create them for you. There won't be a charge for simple parts. Even for fairly complex parts, the charge is rarely over \$30. You can mail us a drawing or even just a sketch of your parts. We'll interpret it for you and then a copy back to make sure we got it right.