Illustrator Guidelines

BEFORE YOU DRAW

In "Document Setup", set Artboard Width to 32" and Height to 18". All parts to be cut or scored must be $\frac{1}{4}$ " inside this perimeter to avoid bleed problems. Effectively, this makes the cutting area 31-1/2" x 17-1/2".

_Do **NOT** set up multiple artboards. Set up multiple files instead.

_All drawings must be expressed in inches.

DRAWING

_Draw everything in Illustrator. Files drawn in other programs that are then imported or pasted into Illustrator will cause problems.

_All lines on all layers must be set to black for laser cutting.

_Lines to be **cut or scored** (rather than engraved) must be expressed as vectors. Select the lines, and in the "Window", "Stroke", drop-down menu assign these elements a **stroke of .001**.

You must type this in; it is not an option to be selected.

_Elements to be **engraved**, such as wider lines and filled artwork, must be expressed in raster mode—that is, they have a **stroke and fill**. Stroke weight should be set to .025 pt or higher. Fill must be set to black.

_Separate layers must be used for parts to be cut, scored, or engraved. Name the layers "cut", "score" and "engrave" respectively.

_lf you must transfer from Rhino, ensure that **all line work is set to the solid black line setting**. Beware of gray "ghost" line color, a gradient line color, or question marks in the line color box.

_If you are unable to set your vector line work to the proper solid color and weight of ".001" after transferring from Rhino, check your Rhino drawing and export it again.

BEFORE YOUR APPOINTMENT

_Erase all stray lines.

_Remove all overlapping and duplicate lines. The laser will double-cut overlapping lines, with very negative results.

Delete all unnecessary information from your file.

ABOUT THE LASER

_The laser's kerf is approximately .008" centered on the drawn line. This will cause the parts that are cut to be slightly smaller than what is drawn. This fact is normally insignificant, but if it is critical to your work, please make a note of it.

_The rule of thumb for spacing between discrete parts is to allow at least half of the thickness of the material between relatively parallel cuts, particularly on acrylics.

For example, if you are using 1/4" acrylic, allow 1/8" spacing between individual parts.