

## Laser Cutter Guidelines

- 1) The Laser cutter is not a short cut to the design process; it will only enhance a sound design.
- 2) Consider your stock size ie. 24" X 12" when designing your cuts.
- 3) Try not to waste stock by making your part size or shape that renders most of the stock useless after your part is cut, an example of this would be cutting parts, that use just the perimeter of the stock, you should always think of manufacturing costs when designing a project. This goes along with #5 and #11 below.
- 4) It is not a way to avoid making SolidWorks drawings.
- 5) It is not a way to avoid simpler and cheaper ways of manufacturing parts.
- 6) Maximum thickness for cutting is 1/4" or less
- 7) File format for the Laser Cutter needs to be .DXF, Make sure to have your part orientation flat on the plane you want cut and, dimensions set to mm or inches before saving.
- 8) Each part needs its own .dxf file, no multiple parts per file.
- 9) The bed size is 24" X 18", so maximum cutting size would be approximately 1/4" less
- 10) Material can only be Acrylic, Balsa, Microlight Plywood, and Foam Board
- 11) All materials come under sized, so you cannot cut a 12" dimension exactly, from a 12" X 24" piece of Microlight, or Acrylic. Allow at least 1/4" smaller
- 12) Material cost for a 12" X 24" sheet of 1/4" microlight is \$8.00, and the same size acrylic sheet is \$16.00, you may need this if you have budget constraints.
- 13) When choosing material, keep in mind how you will fasten it together.
- 14) When requesting a cut, you must specify the material exactly, not just saying wood or balsa. You must specify, type, thickness, and check to see if the material is available.
- 15) Allow three days turnaround time when requesting laser cutting, however, every attempt will be made to complete these requests sooner.