

Digital Media Fab Lab – How To: File Set-Up for Laser Cutting

Proper file preparation is the most effective way to ensure success during any digital fabrication process. Before creating a final project, consider creating a small sample to test out the process.

High-quality sample making explores the following;

- Form. The sample design utilizes elements from the final design. Ex; line weight, level of detail, etc.
- Material. Test out the sample design on a material that supports the concept of the final design.

File Set-Up in Adobe Illustrator

1. Start a new document
 - Create New...
 - Name document, include nameDefine the following PRESET DETAILS:
 - Set the WIDTH and HEIGHT to the material size and choose a material unit - inches, millimeters, or centimeters
 - Set document color mode to RGB
 - Select CREATE
2. Prepare the design
 - CREATE OUTLINES from text objects
 - Use the PATHFINDER to combine shapes
 - PLACE images on separate layers to help with visualizing project outcome
3. Prepare the design for color mapping operations
 - Set stroke weight
 - Set stroke color
 - Remove fills on RED, GREEN, BLUE, and YELLOW
4. Save file onto a USB flash drive

COLOR MAPPING CODES <small>* SET DOCUMENT COLOR MODE TO RGB</small>	STROKE
CUT HEX CODE #FF0000 R: 255 G: 0 B: 0	.001
AIR-CUT HEX CODE #00FF00 R: 0 G: 255 B: 0	.001
SCORE HEX CODE #0000FF R: 0 G: 0 B: 255	.001
POSITIONING HEX CODE #FFFF00 R: 255 G: 255 B: 0	.001
ENGRAVE HEX CODE #000000 R: 0 G: 0 B: 0	ANY

Reminders

- *If the design is being cut out of a larger sheet of material, place a border to make a clean edge on the salvageable material.
- *Grayscale image engraving must be done on a separate Artboard.
- *For your protection, always transfer files to the computer using a USB flash-drive.
- *Prepare the file completely before signing up for time on a machine.
- *Be realistic with time when making machine reservations.