

## INSTRUCTIONS FOR PREPARING YOUR FILES

Copy your drawing into the Laser Cut Template, making sure the bounds of your drawing fall within the dimensions of the cutting bed.

- Assign your linework to the appropriate colored layers. The colors will determine the following: 1) the order in which the laser will cut/score and 2) the depth of the cut/score. Generally, you will try to score first and then cut. We do not use the white, black, brown, or orange layers for cutting, so vectors should be cut and scored on the red, green, yellow, blue, magenta, and/or cyan layers. Here is the order of the colors (top will cut first, then the second will cut next, and so on): red, green, yellow, blue, magenta, cyan.
- Make sure vectors are inside the dotted line. The template's size is adjusted to the size of the laser bed (32" x 18") and should remain untouched. It is advised that you keep vectors inside the dotted line to ensure they are not cropped and/or missed by the laser.
- Make sure your file is aligned to the top left-hand corner of the template. If the material you are submitting is smaller than the template, draw an outline on the file that matches your material size using the 'NO CUT' layer. This is for you to verify that your lines will not go off of the material.
- Use the "SelDup" command in the file to make sure vector lines are not doubled. Doubled lines result in messy cuts and increased fire hazards.
- When vector lines are extremely close together, they can become a fire hazard. As a general rule, you should be cautious with lines any closer than half the thickness of your material. E.g. if your material is 1/8" then you can cut up to 1/16" apart. If the thickness is 1/16" then cut as close to 1/32" as possible.
- If your file has several cut lines, it is best to alternate the cut layers (yellow, magenta, and cyan) so that your material has time to cool down. This will result in cleaner laser cuts.
- If you have nested shapes, please follow the cut order (inner, inner-2, outer). This will prevent your pieces from moving around as they are cut, and result in a more accurate cut.
- Lastly, when laying out your pieces, consider the thickness of the material and affect the assembly and joining of your model.
- If you would like the pieces to be taped, you must provide your own blue painter's tape. Please note that masking tape can tear materials like chip and paper.
- Name your file appropriately and upload it to the [B+C|A Laser Cutting File Submission Folder](#) at least 30 minutes before your appointment time. All files should be named in the following manner before they are submitted: Appointment Date, Time\_Your Full Name\_Email (UNI@barnard.edu or UNI@columbia.edu)\_Material Type.