Cutting Fabric on the Laser Cutter - Cheat Sheet

Laser Cutter Open Fabrication Hours*: **Mon-Fri 5-6pm**

Laser Cutter Policies and How to Get Laser Cutter Privileges (for use outside of Open Fab Hours**) :**
https://resources.ideate.cmu.edu/equipment/laser-cutter/laser-cutter-policies/

Laser Cutter Manual (same as the paper ones in Laser Cutter room):

- **Loading a File onto the Laser Cutter:**
  https://resources.ideate.cmu.edu/equipment/laser-cutter/loading-your-file-onto-the-laser-cutter/
- **Cutting and Using the Laser Cutter Machine:**
  https://resources.ideate.cmu.edu/equipment/laser-cutter/laser-cutting-a-part/

Fabric Specific Settings:

- **For muslin or canvas fabric:**
    - Sewing Line: cut – 375 speed – 10/10 power/max power
    - Cut Line: cut – 200 speed – 30/30 power/max power
- **For fleece fabric:**
    - Sewing Line: cut – 350 speed – 10/10 power/max power
    - Cut Line: cut – 100 speed – 30/30 power/max power

General Steps:

1. Place material on bed
2. Focus the laser cutter (see instructions in Manual)
3. Load your files onto computer (see detailed complete instructions in Manual)
4. Open RDWorks software
5. Set "File Param Settings" to inches for everything EXCEPT the *laser cutter velocity/speed* setting (which should be mm)
6. Import your .dxf file
7. Set the Power & Speed setting for your Sewing Lines. Make sure that layer is on top so it will process first.
8. Set the Power & Speed setting for your Cut Lines. This layer should be after the Sewing Lines.
9. Look everything over.
10. Click on "Download" to send your file to the Laser Cutter.
    a. Click OK to write over the previous file
    b. See that it completed the download
11. Set the Origin point for your cuts (where the upper-left-hand-corner of your design will be)
12. Check the Frame of your design to make sure it fits on your fabric.
13. Close the door on the bed.
14. Hit Start/Pause button to begin the laser cutter.
15. If there is a problem, hit the Start/Pause button to pause, and hit it again to start up again.