

Creative Type Walkthrough

This project combines image files and Ultimaker Cura to generate G-Code files. You will need to start with a grayscale png or jpeg file. If you are creating your own images you may want to use an image editing program like Photoshop.

Photoshop

1. Open a new document in Photoshop, 1 inch by 1 inch, or 25 mm x 25 mm, or 72 pixels x 72 pixels.
2. Zoom in to your document.
3. Using only black and white, design a letter form. Press D to set the foreground to black and the background color to white. Make sure your lines are at least 3 pixels wide.

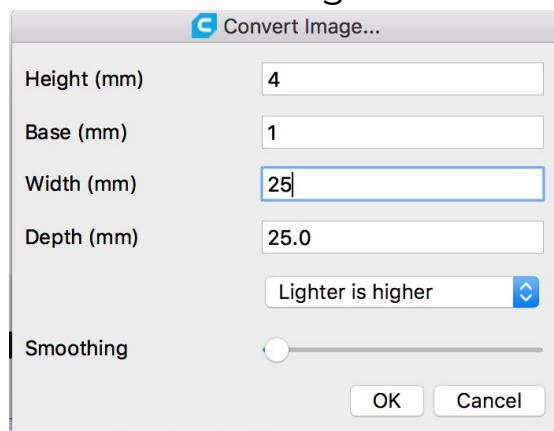


4. Once your image is designed, save it as a png or jpeg.
5. Close Photoshop.



Ultimaker Cura

1. Open Ultimaker Cura.
2. Locate your letter on your computer.
3. Drag the image on to the build plate.
4. If you want your black lines to be inked on your block print, set up the dialog box like this:
 - Height = 4
 - Base= 1
 - Width=25
 - Lighter is Higher
 - No smoothing





5. If you want your final version to look like this: where the lines are not inked, but the background is, then set up your dialog box like this:

- Height = 4
- Base= 1
- Width=25
- Darker is Higher
- No smoothing

Convert Image...

Height (mm) 4.0

Base (mm) 1.0

Width (mm) 25

Depth (mm) 25.0

Darker is higher

Smoothing

OK Cancel

6. You can try printing one or several images and for each letter you could print both versions:



7. Print many letters at a time overnight so that you can have everyone's letters for the next class:



8. In Cura save the platform with your printing parameters as a project so you can reprint your files at another time:
 - Select File: Save Project.
 - Click on Save button.
 - Save the 3mf file with a name that makes sense to future you.
9. When letters are printed, heat the foam (follow the instructions on the packaging) and press the printed model into the foam.
10. If using the foam sheets, trim the square and adhere to wooden block.
11. Use block printing ink or stamp ink to ink the foam.
12. Have students create designs with the blocks.