

Design and File Preparation for Letterpress Printing

Design Considerations

- The physical nature of letterpress printing means that some things will look different when printed than they do in your design file, and manual production means that you may see slight variations in ink coverage, registration, or trimmed edges.
- Colors are printed *one at a time* when letterpress printing. The press uses rollers to apply a thin layer of ink to the plate, type, or block just before each sheet of paper is fed into the press. When printing more than one color on the same sheet, all of the paper is printed with the first color, then the ink is then cleaned off of the rollers, the next ink color is added to the rollers, the new plate is registered, and all of the paper is run through the press again to be printed with the second color (this is why adding additional colors increases cost).
- Lines thinner than 0.25 pt will not be guaranteed to print properly. Do not use "hairline" settings. Always check line widths after reducing the size of objects.
- Fonts smaller than 6 pt will not be guaranteed. Always check point size after scaling type.
- Ruled borders, boxes, or other artwork that runs parallel to the edge of the paper will look best when they are a minimum of 0.25" from the edge of the paper.
- Leaving less than 0.125" between your design and the trimmed edge of the paper is highly discouraged unless the artwork extends beyond the edge of the paper (bleed printing).
- When bleed printing, extend the illustration 0.125" beyond the intended border.
- Type often looks slightly thicker when letterpress printed thanks to the shadows created by debossing (physical impression into the paper).
- Conversely, type and line work that is knocked out will look thinner when printed and will, therefore, require special preparation (see Preparing Adobe Illustrator Files for Letterpress Printing).
- In order to maintain the integrity of non-vector imagery such as calligraphy, hand lettering, drawing, and other non-digital images (ie: vintage engravings), they should be digitized using a specific method (see Preparing Non-Vector Imagery for Letterpress Printing). Do not "vectorize" these types of elements in illustrator.

Design and File Preparation for Letterpress Printing

Design Software Overview

- **Adobe Illustrator (.ai)** files are best for producing letterpress plates when the design includes elements that are *not* hand drawn or hand written such as computer fonts, vector illustrations, etc. **All text that is not hand drawn should be created in Illustrator whenever possible.**
- **Adobe Photoshop** is used to process non-vector elements like hand lettering and scanned illustrations, text, or design elements which are then embedded into the Adobe Illustrator (.ai) file. When *all of the elements* in a design are non-vector, the entire design file can be created in Photoshop and sent as a native Photoshop (.psd) file.
- **Adobe InDesign (.indd)** files can be used, but can be quirky and unreliable at times, so are not recommended.

Preparing Non-Vector Imagery for Letterpress Printing

1. Make a high resolution (600 dpi min) grayscale scan as a TIFF. You can use a photo if you don't have a scanner, but you may see irregularities or lower overall quality
2. Open the file in Photoshop.
3. Do any necessary clean up (stray marks, adjustments to figures, etc.).
4. Make sure the **Image > Mode** is **Grayscale**.
5. Use Levels (Image > Adjustments > Levels) or Curves *with a live preview* to bring the image as close to black and white as you can without compromising the letter forms or overall appearance.
6. Convert **Image > Mode** to **Bitmap**.
Important: when prompted, choose **Resolution Output = 1200 ppi**, and **Method = 50% Threshold**.
7. Save as a native Photoshop (.psd) file.
8. When creating the overall design in Illustrator, **embed this file into your Illustrator design file** (if the entire design is non-vector, simply send the .psd file).

Design and File Preparation for Letterpress Printing

Preparing Adobe Illustrator Files for Letterpress Printing

1. Make a copy of your design file to convert into a plate-ready file.
2. The file should be in **File > Document Color Mode > CMYK Color**.
3. For 2-sided pieces, front and back should be on *separate artboards*.
4. Anywhere text or illustrations touch the edge of the final piece, extend them 0.125" beyond the intended border (commonly called "bleeds" or "bleed printing").
5. Make certain that nothing is "hidden." Expand all layers and groups completely to confirm that everything is visible.
6. *Remove/delete all elements that you do not want printed, even if they are not on the artboard. Failure to do this may result in extra plates being made, resulting in increased plate costs.*
7. **Embed all linked artwork/files/elements or include all linked files** when sending.
8. **Group the design elements and text by color** (put each color on its own layer, or group elements by color on a single layer).
9. **Add a cyan key line** to each artboard designating the *finished trimmed size* on each piece. *If there are no bleeds, you may make the art board(s) the exact size of the final piece(s) in lieu of a key line. When you are working with standard card sizes I can provide you with Illustrator templates if you'd like them.*
10. **Add a 0.25pt white outline** to all **knocked-out** (unprinted paper surrounded by printed background) **type and/or illustrations**. In some cases, this may require that you increase the overall size of the knocked out type/area/images, but it usually does not. The outlined version should look uncomfortably thick in order to print "normally."
11. **Convert all text to outlines**. I recommend adding +10 to +20 tracking on all text *before converting to outlines* because the impression caused by printing will reduce the space equally between all letter forms (this will not change your kerning).
12. **Convert everything that is not white to 100% Black (C=0,M=0,Y=0,K=100), including the color components**. To be certain this is done open the "Separations Preview" window, select "Overprint Preview," and *de-select* the Black layer. Anything that is not 100% Black will now appear gray; you can select it and make the necessary changes right there.
13. Send design file(s) as native Adobe Illustrator (.ai) files or as PDFs. If saving the file as a pdf, select "Preserve Illustrator Editing Capabilities."
14. **For all pieces printed in two or more colors**, please send a png, jpeg, or pdf of each piece in full color at the final paper size(s). *Bleeds should be cropped on these files.*