PEACOCK PRESS

General Art Preparation Guidelines

This guide will outline steps necessary to create a file suitable for commercial printing quality. The tips and guidelines in this document are universal across all applications and should be applied to any artwork submitted to a printer.

File Setup:

When initially setting your file to print, there are several steps to take to ensure that the document is ready for commercial printing. We will walk through many of these steps to help ensure that your file is usable.

Color Mode:

When setting up your document, it is imperative to choose the correct color mode for commercial printing. There are two color modes available: CMYK (cyan, magenta, yellow, black) and RGB (red, green, blue.) There are also PMS (Pantone Matching System) colors, which will be discussed a bit later.

One of the most common mistakes made when setting up a document to print is creating the document in the incorrect color mode. Commercial printing is done in four colors: cyan, magenta, yellow, and black. Through combining different levels of each of these four colors, most naturally occurring colors can be created. Therefore, it is imperative to set up your document in CMYK mode. Each application has a different way to do this, but most applications used to create artwork for commercial printing will have an option available to change this setting.

RGB color mode is used for displaying colors on computer monitors, and will not render the desired color when printed commercially. The reasons for this are twofold: 1. RGB has no black! On a computer screen, black is created by the ABSENSE of the other colors, but in commercial printing, the black must be printed on the white piece of paper to create black color. 2. The range of colors that RGB can create is much broader than that of CMYK. So, if a color is chosen in RGB that cannot be created in CMYK, that color will print very poorly. But, RGB can adequately create every color combination of CMYK.

A common counterpoint to RGB versus CMYK color mode is that many people will say 'but it printed out on my desktop printer just fine, and it uses CMYK inks.' While this may be true, the drivers to desktop printers are designed specifically to interpret RGB colors into CMYK, and the software used by commercial printers is not.

If there is a slight chance a document will be printed by a commercial printer, go ahead and create the document in CMYK. Your computer screen and your desktop printer can easily render any color created in CMYK, so there will be no issues when it is to be printed.

Preparation of Pictures for Commercial Printing:

Another common mistake is not preparing pictures correctly for commercial printing. The two areas necessary to prepare a picture correctly are resolution and color mode of the picture.

Digital cameras take and display pictures in RGB, not CMYK. Therefore, in a picture editing application (ie. Photoshop or similar), the picture must be opened and the color mode changed to CMYK. After the file has been resaved in CMYK color mode, it can be used for commercial printing purposes. If this is not done, the picture may appear washed out due to the absence of enough black, due to the reasons discussed in the color mode section.

The second step to preparing a picture correctly is ensuring that the resolution of the picture is high enough to be printed. Commercial printing requires very high resolution to print correctly, whereas pictures used for display on computer screens can be very low resolution and look great. In fact, for many internet applications, lower resolution is preferred because the file will need less memory and download faster. The opposite is true for printing – higher resolution means sharper images.

A picture displayed on the internet may look just fine at 72 ppi (pixels per inch), but a minimum of 300 ppi is necessary for commercial printing. The reason being is that computer screens display pictures at a much lower resolution than commercial printing. Most modern printing equipment is set up to render images at 2400 dpi, so a high resolution picture is a must.

The resolution of a picture can be viewed through an application built specifically for manipulation of photos (ie. Photoshop.) Unfortunately, there is no way to increase the resolution of a photo or image, so the photo must be taken at a high resolution.

If you have questions about the resolution of your photo or are unsure how to check resolution, please contact our prepress department. Someone will be happy to either guide you through the process or take a look at the file to see if it is suitable for printing purposes.

Other General Guidelines:

Bleed:

Bleed is used to describe when photos, background, or images are designed to go off of the edge of the document. If you are setting up a document that has bleeds, follow several guidelines that will make the document suitable for printing.

When designing the file, make sure to extend any image or picture that will bleed AT LEAST 1/8" (3/16" is preferable) beyond the document's finish (trim) size. In order to facilitate bleeds, we must print this bleed area, and then trim the document to its final size. Because of the slight variability of printing (paper is pliable after all!), we need at least 1/8" of bleed. If your document final size is 8.5x11 and bleeds on all four sides, we will have to print an image that is 8.75"x11.25" (add 1/8" on all four sides), then come back and trim it to its final size of 8.5"x11".

You can facilitate bleeds in a couple different ways. The first way is to set up bleeds upon initial document setup. The Adobe applications will ask if bleed is necessary during document setup, and you can enter 1/8" (.125") for all four sides.

Upon document export (which is covered in other documents), make sure that the bleed setting is set to at least .125". This option will be available in applications built to create files for commercial printing. It is imperative that bleeds be added to the file we receive, because it is a very difficult task to add bleeds to a document.

Unfortunately, if you are using an application that is not specifically meant to create documents for commercial printing (ie. PowerPoint, Publisher, Word, Excel, and many others) you SHOULD NOT design your document with bleeds. These applications will not support bleeds, so there should always be white space at the edge of your document.

Safe Zone:

Due to small variances in printing and cutting, no important images or text should be placed within 1/8" (preferably 3/16") from the edge (trim) of your document. This 1/8" area is considered a 'safe zone' and ensures that nothing important is trimmed off in the finishing process.

A document that has bleeds on all four sides will have image within the safe zone, and that image will extend beyond the edge of the document to facilitate bleeds, but there will be no important text or images within 1/8" of the edge of the document.

Discussion of Use of Pantone (PMS) Colors:

The Pantone Matching System is a set of colors for which printers can look up the specific ink mixture and recreate that color with accuracy. Applications made to create files for commercial printing will support the use of PMS colors, and there should be a specific palette for you to choose which PMS colors you would like to incorporate into your design.

There are two common mistakes made when a designer is using PMS colors, both of which will be discussed here.

The first common mistake is when a designer would like to print in those specific PMS colors in which they designed, but the application will not export the file correctly to support PMS colors. Unfortunately, unless an application was designed to specifically support PMS colors, it SHOULD NOT BE USED to design artwork for commercial printing in PMS colors. For instance, although MS Publisher will allow a person to choose a PMS color for design purposes, when that file is exported, the PMS color information disappears, and that PMS color is translated into either RGB or CMYK color mode. The Microsoft applications DO NOT support PMS color information – they cannot be used to print in PMS colors.

The second common mistake is when a designer wants to print in CMYK, but designs in PMS colors. If this is the case, the PMS colors MUST BE changed to CMYK before submitting artwork. If they are not changed, you may end up missing colors on your final product for the following reason: When a printer prepares for printing, they are only going to print in cyan, magenta, yellow and black. If you have sent over a file in CMYK plus PMS 185, the PMS 185 will most likely not print. To avoid this situation, make sure you use your application to change all colors to CMYK.

If you need help changing a document from PMS colors to CMYK, please contact our prepress department – someone will be happy to walk you through the process.

A Quick Note on Proofing Methods:

After preparing and submitting a file for printing, some form of proof is created and should be reviewed by the customer. This proof generally is provided either via hardcopy printout or digital file (usually a PDF.)

The purpose of the digital proof is for the customer to review all images and text (“copy”) to ensure that everything is placed correctly and that nothing has changed after the printer processes the file. Digital proofs are not designed to match color perfectly due to limitations in monitor calibration. As previously discussed, monitors display colors in RGB, and printers print in CMYK – so the colors printed may not exactly match those displayed by a computer screen.

The hardcopy proof is meant to closely resemble the final printed product. Although hardcopy proofs are at a lower resolution than the final product, proofing machines are calibrated to the printer’s specific machinery, and are designed to match the final product closely.

If there is any doubt about color – order the color proof. Although there is usually a small charge and some additional time associated, it is worth the small amount of extra time and expense to view a hardcopy proof.

RULE OF THUMB: ALWAYS ALWAYS ALWAYS check the entire proof you are sent. When printers process files, they are looking for many other things and might miss the fact that a font did not translate correctly or an image jumped. Any time a file is opened on a different computer than it was created, there is a risk of something changing despite our best efforts to ensure otherwise. Believe it or not, even a PDF can change on different systems, so double and triple check all proofs.

File Export:

Although we have other documents that go into further detail about file export, the subject warrants a short discussion here.

Most printers prefer to receive complete files, which they cannot alter. Although submitting files would seemingly be a simple process, unfortunately it can get quite confusing. A few simple guidelines can simplify the process.

We prefer to receive a print ready Adobe PDF file. The PDF file, if prepared correctly will contain everything a printer needs to correctly process a file. To change your file to a PDF, some applications you will be able to 'Export' to a PDF, and in others you will have to 'Save As' and choose PDF as the file type. To export a file to a PDF file, please review the PDF settings when you export:

1. The quality of the PDF should be set to 'Press Quality.' This ensures the file carries high enough resolution to print successfully. Make sure that any other resolution settings are at their highest settings. This creates a large file, but it ensures enough information is included for commercial printing.
2. Make sure that under 'bleed' settings that at least 1/8" (.125") is included. No printer's marks are necessary (do not include color bars, registration marks, etc.)
3. If available, make sure that the destination is 'Working CMYK.' Some applications may not support this, but those that do will make sure enough information is included in the file to print correctly.

There are other file formats that are suitable for printing, but the PDF is most helpful. If you are sending us a file in its native application, make sure the file is packaged with all fonts and links. Even though we may have the font you used, there can be many different versions of a single font. Additionally, please outline (or change to curves) all text – this prevents any font issues including font versions and text reflow. If you are sending a .jpg file, it must be exported at 300 dpi or greater and the color mode needs to be set to CMYK. When using .jpg files, PMS colors cannot be used.

If you are going to change text to outlines or curves, be sure to save your document with a different name first, so you can always return to your original document if changes are needed.

The only files we can accept in their native form are Adobe InDesign, Adobe Illustrator, Adobe Photoshop, and Quark. All other file types need to be changed to a PDF using Adobe Acrobat.

Further information regarding file exporting from specific applications is available on our website.