

Printing Services, Inc.

Printing & Prepress Basics

How to translate your ideas into printed projects with a printer.

Four-Color Process Printing

Offset lithography is a process that uses a combination of four process colors, cyan, magenta, yellow, and black, generally noted as CMYK, to produce full-color images. Spot colors, standardized by the Pantone Matching System®, are also available in offset printing, but know that when creating your documents, you need to be sure of two basic image guidelines.

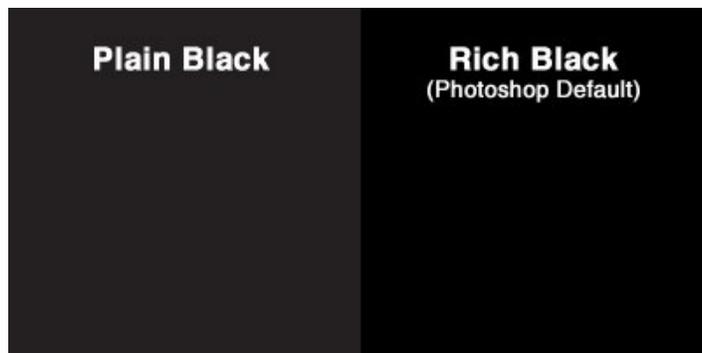
Get the Mode Right

First, always make sure that each and *every* photo or image you include (both raster and vector) are in CMYK format and *not* RGB. Any images that you leave in RGB mode will have to be translated into CMYK by your prepress operator before going to print. This not only takes more time for a prepress technician, but leaves you unsure as to how your color will turn out once on press.

Image Quality

It shouldn't have to be said, but 72 dpi (dots per inch) will not produce a quality image on press like it will online. Always be sure that each of your images is set to at least 300 dpi before sending them to your printer, or you'll be sadly disappointed when a gorgeous photo you spent hours editing turns out blurry and pixelated once it's in your hands.

One of These Blacks is Not Like the Other



There are several different types of black when it comes to printing, but the two most widely used terms are "plain black" and "rich" or "full black." Keep in mind, "rich black" has several variants, depending on your printer's preference.

Plain Black

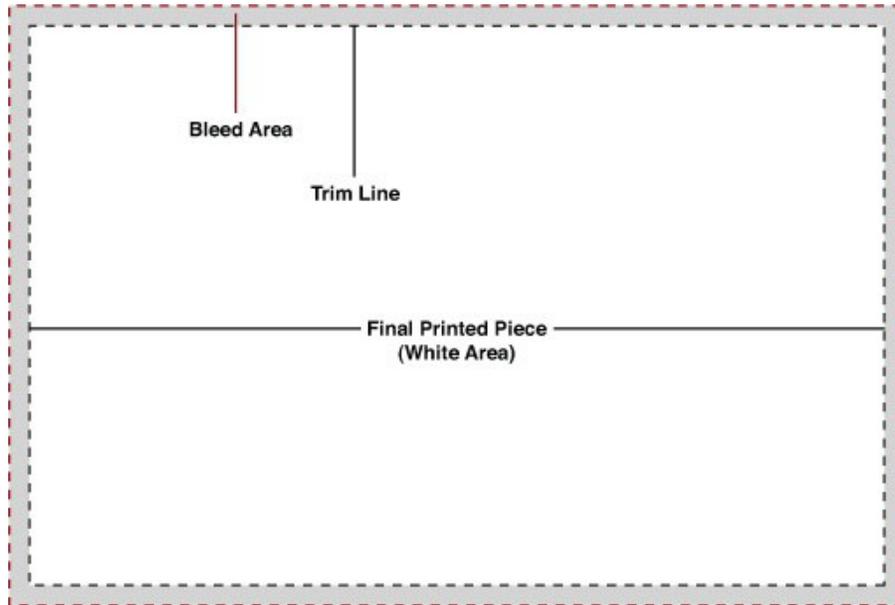
When you use black in a program like Illustrator or InDesign without choosing a Pantone color, the CMYK breakdown automatically defaults to C=0 M=0 Y=0 K=100, where black is fully saturated and the other three are completely absent.

Rich Black / Full Black

With rich black, know when you're designing is that the Photoshop default for black is different than other programs (where C: 75, M: 68, Y: 67, K: 90).

Prepress Preparation

Bleed



If you'd like any/all of your image(s) to run completely to the edges of your final printed piece, you'll have to include what's referred to as bleed on all edges of your documents. The bleed area is simply excess image that won't end up in your final piece, but will run on press and will later be trimmed off. Because paper is likely to shift slightly while running through the press, leaving excess image area is crucial.

To avoid this problem, always ask your vendor how much bleed they prefer to be included and make sure to design your documents to spec from onset, knowing the excess portion of your piece will eventually be cut off. Typically, bleed area only needs to be somewhere between 1/8" to 1/4".

Trim Marks

Trim marks are simply small lines placed outside of your image so that the printer knows where to cut once everything is printed. Even if you don't place these on your documents yourself, simply telling your vendor the finished size of your piece(s) will help them to know where to cut.

Prep

Packaging

We ask that you package a copy of all of the original font files contained in the documents you're printing along with all of your other files, so that in the event something goes wrong with one or more of your fonts. We are able to install the fonts on their own system in hopes of correcting the problem.

Outlining

In addition, we may ask you to "outline" your fonts. This turns the characters of each font into paths rather than actual type, almost like you had drawn a shape in Illustrator, rather than typed text with the Type tool. When a file is opened, the software program isn't trying to call up a font. *This cannot be done in Photoshop.

Keeping in Communication

These are the basics, there may be problems that prepress operators often face when preparing files for print. The best way to avoid running into any issues is ask in advance. If possible, ask before you even being creating your documents. If you ever have any questions at any point in the process, always know that you can ask.

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