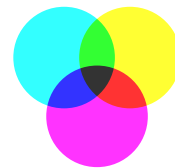


FOUR-COLOR PROCESS GUIDELINES

GENERAL GUIDELINES ALL PRINTING METHODS

Four-color process printing is used for reproducing high-quality graphics with photo-quality images. This also works well for small, multi-color graphics in which the total color count would exceed seven or eight colors.

Digitally-created process images should be created in or converted to **CMYK** (cyan, magenta, yellow, black) format. Some programs, such as Photoshop, default to **RGB** (red, green, blue) format and must be changed. *Note any color change in the image when converting from RGB to CMYK and adjust colors as needed.



Follow the instructions below for best results when using a scanned image within the art layout.

- Use an original, continuous-tone image scanned on a high-end drum scanner.
- The scan must be CMYK at 300 DPI resolution or higher at actual print size. Most flatbed scanners only scan in the RGB mode. Although these files will look good on the computer monitor, the color information will not convert correctly for a four-color process printed image.

Both created and scanned images must have a resolution of 300 DPI or higher at final print size.

Resolution cannot simply be increased in the program if working from a low resolution file. This merely spreads the original pixel information across a greater number of pixels and does not improve image quality. (Most internet images are a low resolution of 72 DPI.)

Scanned images cannot be manipulated. Text, logos, borders, etc. should be created in a vector-based drawing / layout program such as CorelDRAW, Illustrator, FreeHand or QuarkXpress. This allows us to make necessary adjustments to the digital file, such as adding trap.

Convert all text to paths, curves or outlines. If this is not possible, send both screen and printer Type 1 fonts used for the job being printed.

Send a copy of all original supporting files used to create the image. When sending Photoshop files, leave the art in layers. Do not flatten or merge layers.

Color proofs are made from the digital file and may vary slightly from your computer monitor or color printer. The final printed product may also vary slightly from the color proof due to the differences between printing and proofing methods.

FOUR-COLOR PROCESS GUIDELINES

ADDITIONAL CONSIDERATIONS SCREEN PRINTING ONLY

Four-color process printing is for reproducing detailed, photo-quality images. An image with large solid color areas is best produced using glossy spot color inks.

Spot colors should be used in addition to the process image when color is critical, such as company logos, text or borders. Large coverage backgrounds may also require a spot color. All spot color information must be defined in the file using Pantone® or stock colors.

Image with small white text: Any text that is 14 point bold or smaller needs to be overprinted for registration. There should not be a knock out behind this copy.



Small text outside the image area: If text color is anything except black and the size is smaller than 14 point bold, it should be run as a spot color for registration purposes.

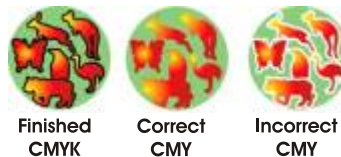
Black text 55 point or larger and large coverage areas should print as spot black.

ART CONSIDERATIONS ALL PRINTING METHODS

For small black text, fine lines or detail lines within an image, set black to overprint (no knock out).



Detail lines within an image.



The examples to the right show how to prepare bleeds, margins and borders. All text or significant parts of the image must be in from the cut line following the same guidelines.



- Screen print:** Margins and borders are a minimum of 1/8".
- Offset:** Margins and borders are a minimum of 1/8".
- Roll Label:** Margins and borders are a minimum of 1/16".
- Sublimated:** Margins and borders are a minimum of 1/4".