

## Top Ten Page Building Tips

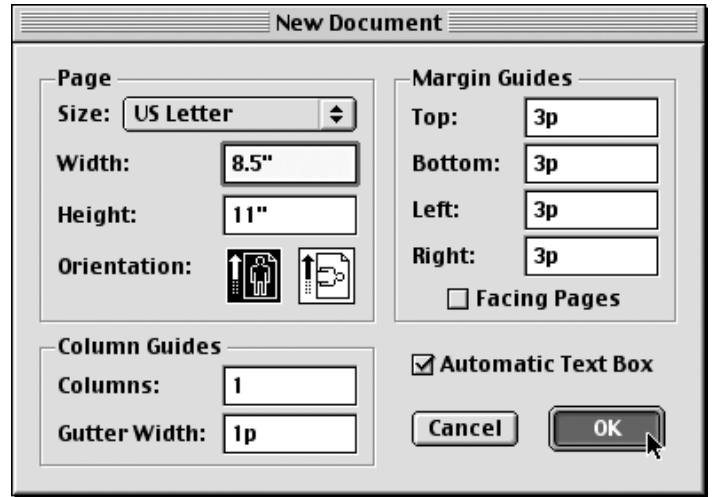
### Page size for printing

**A**lways build your pages to the final printed size (trim size in printing terms). The New Document dialog box from QuarkXPress at right shows a page to be printed at 8.5" x 11", the final trim size. In this example the Margin Guides at the default, 1/2" or 3 picas. Facing pages is turned off and an automatic text box is turned on.

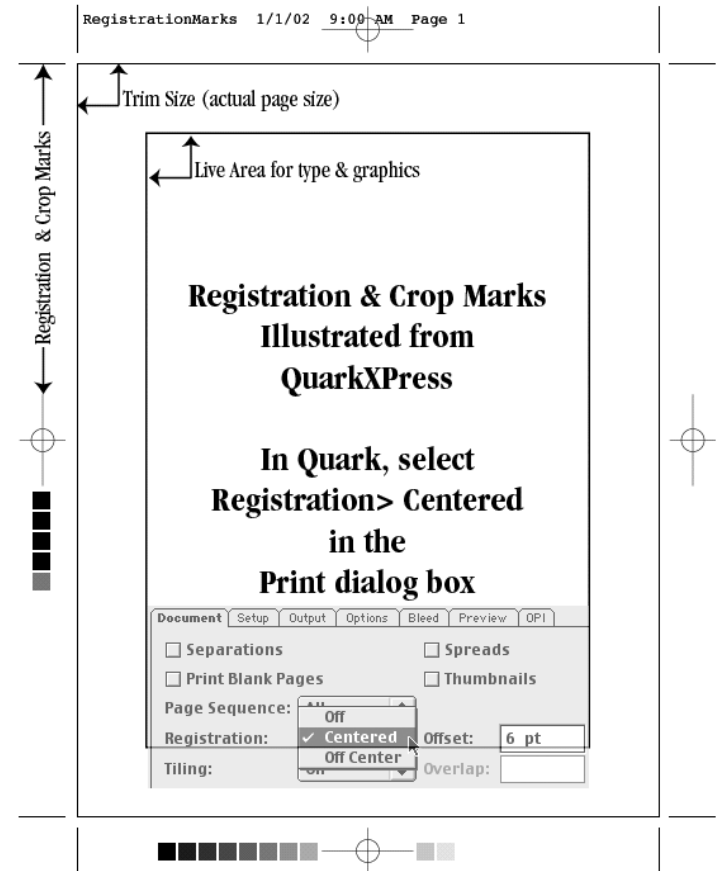
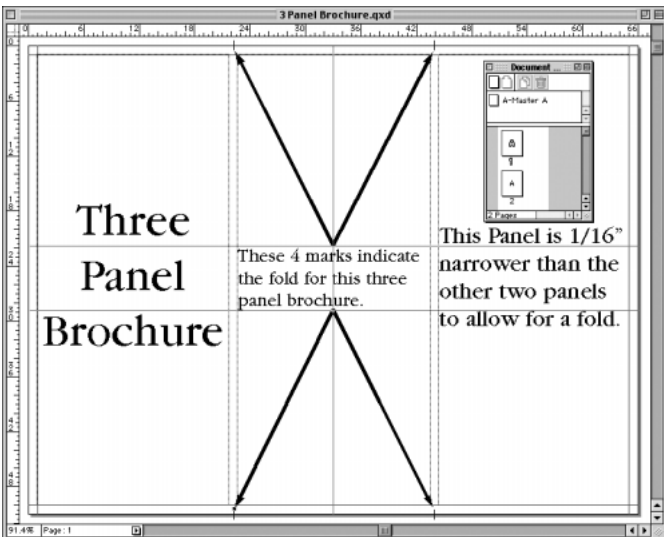
The illustration below shows the registration marks Quark automatically places when "Registration" is turned on in the Print dialog box (a portion of the Print dialog is shown below). This is why we need the document setup to the correct size, the pages will be trimmed to these crop marks.

The only exception is a 3-panel (or more) brochure. Set this type of document up as a 2 page document the width (and height) of the unfolded sheet, as shown below. As noted below, the third panel is typically 1/16" shorter to allow for the fold so the document folds flat. Check with us for allowances on heavier paper stocks or other brochure setups.

On the other hand, booklets should be setup by pages. Never setup a two page spread as one page. Contact us with questions about items such as crossovers. In the example below the "S" in the middle of the page is a problem.



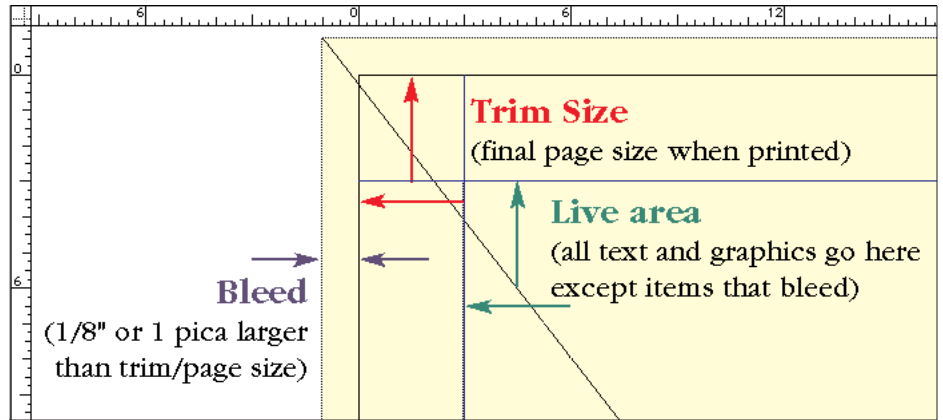
Quark "New Document" dialog set up the the 8.5" x 11" trim size document.



This example illustrates the registration and crop marks Quark applies when registration is turned on in the Print dialog box.

## Bleeds

Items that bleed should be positioned 1/8" or 1 pica over the page or trim size, as noted in the illustration on right. In a perfect digital world, this wouldn't be an issue, but printing is a mechanical process and the paper is trimmed with a guillotine cutter. A slight variance on the cutter could make the edge of the paper show, if this extra allowance isn't made. 🌈



## Page Layout Applications

For the best results in printing your document, use one of the three page layout applications: QuarkXPress, InDesign, or PageMaker.



Other applications such as Microsoft Word, Microsoft Publisher, and Microsoft PowerPoint are great applications for what they do, but are not designed for ink-on-paper printing.

Word is a word processing program and although graphics can be placed in a Word document, color graphics do not separate into the process colors

(cyan, magenta, yellow, and black) for printing. Copying and pasting graphics into Word turns them into Pict or BMP files. Both of these formats are low resolution and not suitable for printing.

Microsoft Publisher was designed for an office inkjet or laser printer as its final output. As with Word, Publisher is not designed for ink-on-paper printing. PowerPoint is designed for presenta-

tions projected on a screen. Graphics in PowerPoint are low resolution (72 pixels per inch, PPI) and use RGB (red, green, blue) color rather than the CMYK (cyan, magenta, yellow and black) process colors needed to print ink-on-paper.

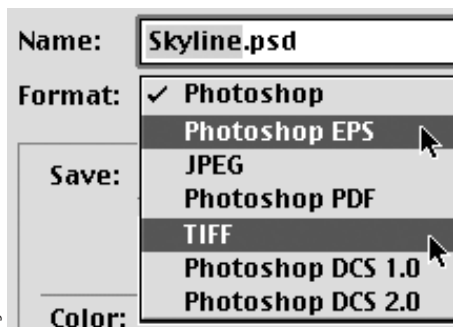
We can work with these programs but it is more time consuming, potentially more expensive and the results a compromise over the results from a true page layout program. 🌈

## Graphics file formats

Scans, digital camera images, stock photography, and any other photographic type or Photoshop (bitmap) image should be saved as either EPS or TIFF format. A TIFF format file should not be compressed. In some cases a JPEG file can also be used, if it has not been compressed very much. Saving a JPEG file from Photoshop should be saved with a Quality of 8 or above (High or Maximum) for printing. Other JPEG setting may result in an image that shows "JPEG artifacting," see below

An illustration from Adobe Illustrator, Corel Draw, or Macromedia Freehand must be saved in EPS format. 🌈

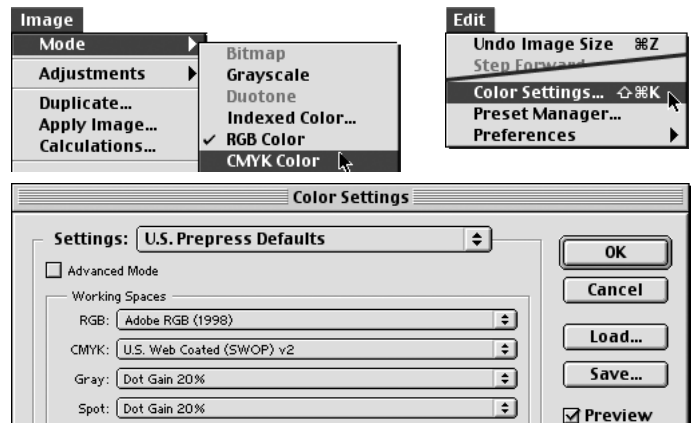
by Clint Funk



JPEG artifacting

## CMYK not RGB

For printing images must be saved in the CMYK process color space, not RGB. Images that are scanned with desktop scanners, captured with digital cameras, and most stock photography are RGB and need to be converted in Photoshop. Contact us with questions about the proper setup for conversion. We used customized RGB to CMYK conversions for certain jobs and would like to help you convert for the best printed results. 🌈



## Resolution

The optimum rule for resolution of a bitmap (Photoshop) image is 2 times (200%) the printing line screen. Printing is a “fool the eye” technology. Presses use dots of ink to simulate a continuous tone photograph. These dots vary in size but are a uniform distance center to center. The number of ink dots per inch is the printing line screen called “lpi,” lines per inch. Common line screens are 85 lpi for newspapers, 120 lpi for uncoated (newsletter type) papers, 133 lpi for most consumer magazines, 150 lpi for high-end magazines and brochures, 175 lpi for annual reports, and higher. Check with us to determine the appropriate line screen for your job. For scanning, double the line screen for the scanning resolution and



Continuous tone to Printing dot of ink measured in lines per inch (LPI).

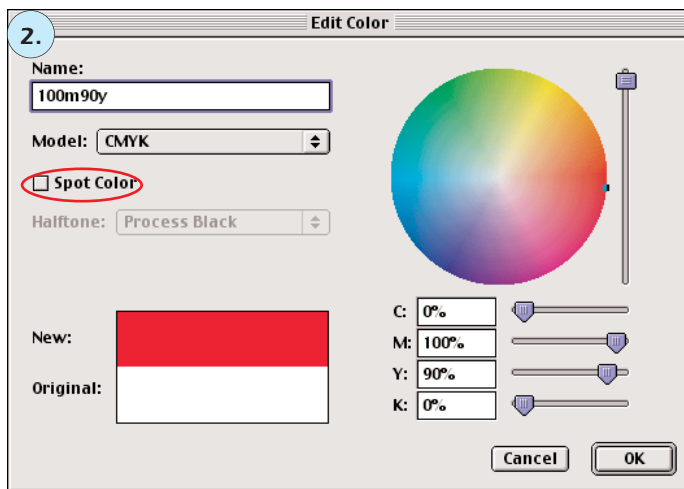
Optimum Resolution:  
 $LPI \times 2 = \text{Scanning Resolution}$   
 Plus any scaling factor (x 2 again to increase image size 200%)

include any scale factor as well. For example a 4" x 5" photographic print to be printed ink-on-paper at 150 lpi and enlarged 200% would be

scanned at 300 ppi (pixels per inch, often referred to as DPI) plus a scale factor of 200%.  $LPI \times 2 \times 2$ .

## Defining Color for print

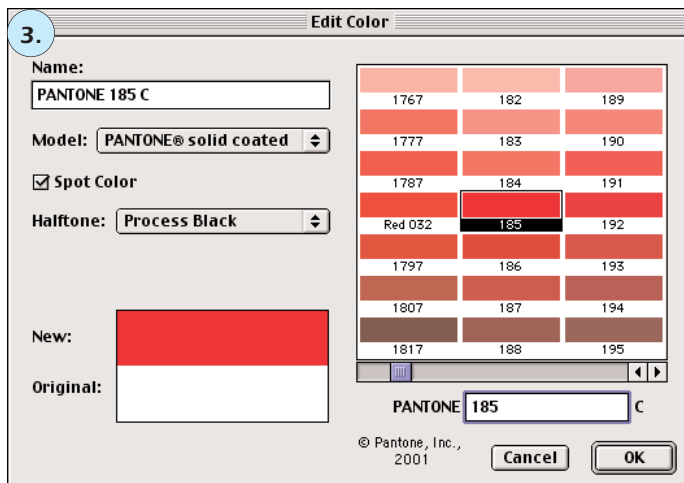
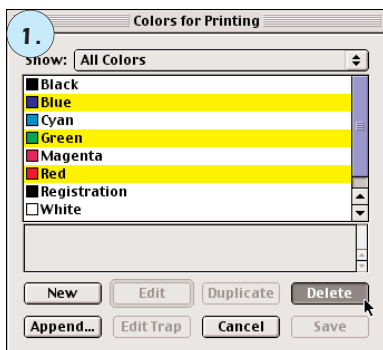
Any document that has a color photo in it is a 4-color or process color document by default. As noted above, the four process colors are cyan, magenta, yellow, and black (CMYK). Catalogs, magazines and other multi-page documents for mass distribution that contain color photos are almost always 4-color printing jobs. When adding other specific colors be sure to compose them with percentages of the process colors and turn off Spot Color. Do not use the Pantone spot colors to define colors for a process color job. Although they can be converted to process colors the results may not look as expected.



1. Delete Red, Green, and Blue from any document for printing.

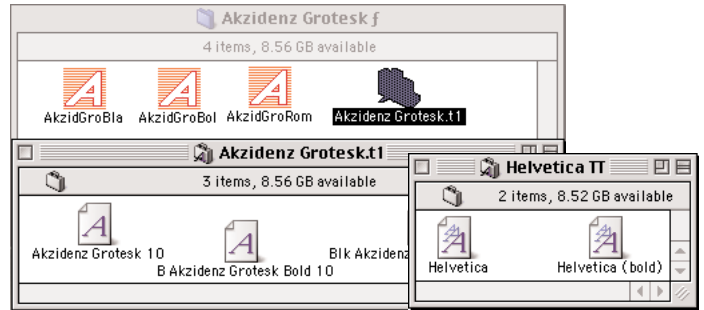
2. For 4 color printing, define colors with cyan, magenta, yellow and black. Be sure to turn Spot Color off (as shown)

3. Define Pantone Spot Colors as noted. To convert Pantone color to process colors, Choose the Pantone color, then select Model: CMYK. Turn Spot Color On.



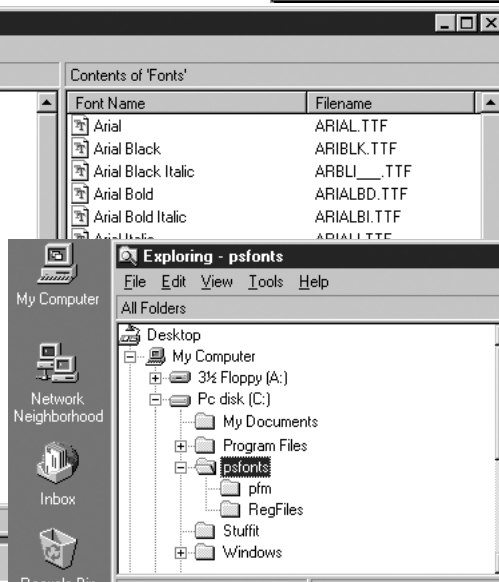
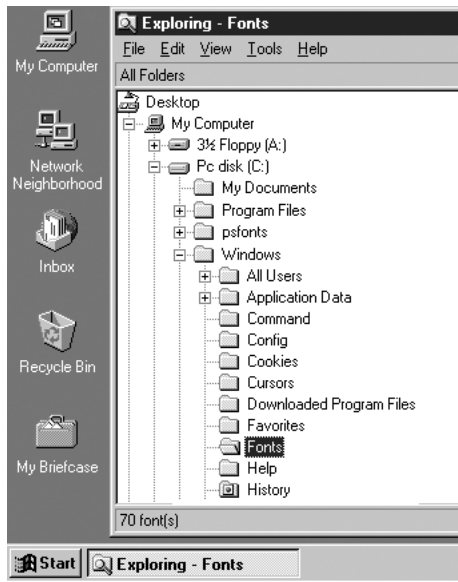
## Fonts

The preferred font format for ink-on-paper printing is PostScript Type 1 as opposed to TrueType. We can use TrueType fonts as well. Our best advice on fonts no matter which format is to use only one format, PostScript Type 1 or TrueType, not both as text reflow problems can occur when using a mixture of font formats. For more information on font specifics, see our Fonts Quick Reference.



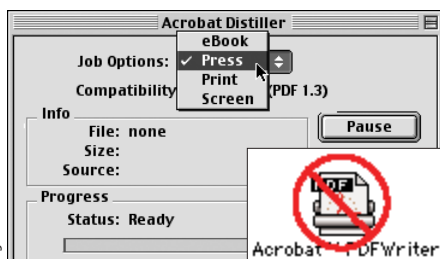
Above: examples of Mac fonts, PostScript Type 1 on left and TrueType, bottom right.

Right: Windows TrueType fonts  
Below: Windows PostScript Type 1 fonts. Must have ATM to add PostScript Type 1 fonts



## PDF

We use PDF extensively and do accept PDF files, but they need to be made correctly for ink-on-paper printing. The basic rule of creating a proper PDF file is to use Acrobat Distiller to create it, not PDFWriter. When using Distiller, be sure the appropriate Job Option is chosen before distilling and that Job Option is "Press Optimized" not "Screen Optimize" the default. For more specifics on creating a print ready PDF, see the PDF Quick Reference.



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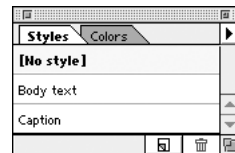
## Page layout productivity

This last tip isn't directly about printing, but as it can cut 20-30% of your production time we want to include it. In your page layout program, whether it is QuarkXPress, InDesign, or PageMaker, be sure to take advantage of the automation functions, style sheets, master pages and templates.

Style sheets automate text formatting and is probably the biggest time saver of all and also the easiest to implement. After formatting a line of text that will be used repeatedly such as a headline and body copy simply keep the text selected, open the styles dialog (Quark: Edit> Style Sheets. InDesign: Type> Paragraph Styles. PageMaker: Type> Define Styles) and name the style. Both Quark (versions 4 and 5) and InDesign have character styles as well.

All three page layout applications have master pages to simplify and pro-

### Save current document as:



vide consistency for items placed repeatedly on multiple pages. The consistency of placement for a quality printed piece is most important and the increased speed of production layout and important benefit of master pages.

Put both styles and master pages together in a template for documents like newsletters, other publications and catalogs and save the document as a template for additional speed and consistency.