

Citizen Printing, LLC



**PDF Production
General Specifications**

Software Recommendations

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Software Recommendations

! *The use of non-compliant software may cause your pages to flush or crash during imaging production.*

! *Remember to notify Citizen Printing Before you upgrade your software!*

! *It is not acceptable to build graphics, ads or pages in word processing applications.*

Compliance

The software that you use to build your publication must be compliant with Citizen Printing's Apogee Imaging System.

The software on this list is considered compliant for page and image production at Citizen Printing.

QuarkXPress 4.11

Adobe PageMaker 6.52, 7.0

Adobe InDesign 1.5 - 2.0

Adobe Photoshop 5.2 - 7.0

Macromedia FreeHand 8.0

Adobe Illustrator 8.0 - 10.0

Adobe Acrobat & Distiller 4.05 - 5.0

Enfocus PitStop 4.61 - 5.02

Adobe PostScript Driver 8.7 or higher

Miscellaneous Software

You will need the following software to produce PDF files for Citizen Printing.



Apogee PPD - This is the Apogee PostScript printer description from AGFA. This PPD is supplied to you from Citizen Printing.

Citizen.joboptions - This is a custom Distiller profile. This profile is supplied to your from Citizen Printing.

Custom Bleeds - A Quark xtension. You can download this xtension at www.quark.com.

Contact your Tech CSR if you have questions about software.

Graphic File Formats

TIFF or EPS!



Never use the DCS format!



Do not save pages, ads or graphics as Quark EPS files!

Saving Graphics

Most applications are capable of saving and exporting graphics and text in a variety of formats. It is important that you use the correct file formats for high-resolution digital production.

When scanning photos, save your files as:

TIFF - For grayscale and bitmap graphics.

EPS - For color photos and graphics.

Do not attach any JPEG or LZW compression to TIFF graphics.

When saving files in Illustrator or any other vector based application, save your files as:

EPS - For color and grayscale.

DCS Files

DCS files are not compliant with the Citizen Apogee PDF workflow. Never save a graphic in the DCS format.

Quark EPS Files

QuarkXPress has a command that allows you to export a page as an EPS file. We have experienced many problems with pages and ads that are exported from Quark.

Process your ads into PDF files to embed fonts and graphics for high resolution production. This technique is perfect for ads that frequently pick-up.

Color

Build and save all color graphics as CMYK. Please discuss your spot color needs with your Tech CSR prior to production.

Fonts

! *Some TrueType fonts will not embed into PDF files.*

! *Some fonts are not licensed to embed into PDF files. You will need to replace unlicensed fonts!*

Type 1

Fonts created with Adobe's proprietary font-creation tools are called Type 1 fonts. These fonts have been specifically designed to print via Adobe's PostScript description language. Type 1 fonts are the most reliable font format to use for high-resolution digital production.

Important Font Guidelines

Choose Type 1 fonts over TrueType.

Most TrueType fonts will process to PDF.

Some TrueType fonts cannot be embedded into PDF files.

All fonts used in your graphics, ads and pages must be embedded into your PDF files.

Do not send PDF files with replaced or missing fonts for production.

Do not accept PDF files with missing fonts from your advertisers.

Some fonts are not licensed to be embedded into PDF files. You will need to replace unlicensed fonts.

Font Problems

Most font problems are rooted in disorganized and mismanaged font lists. Save yourself some trouble, and organize your font list before attempting to produce PDF files.

You are responsible for preflighting all supplied ads and graphics for font problems.

We are happy to assist you with font management. Contact your Tech CSR prior to live production for assistance with your font list.

Fonts

! *Note: A PostScript compatible printer is not a true PostScript interpreter. Printed copy from a "compatible" is not considered a contract proof.*

Simple and Complex Font Families

A simple font family is usually displayed as a single listing in the font menu. Simple fonts can be styled through menu commands or keyboard shortcuts.

A complex font family is made up of many different font styles. *Complex fonts cannot be assigned menu styles or keyboard shortcuts.* To style a complex font, you must select the actual font style from the Font menu.

Assigning a keyboard shortcut style command to a complex font will produce unwanted results. Don't be fooled, keyboard styled fonts display on screen, but they do not print to PostScript output devices.

Figure 1 was created with the "Leewood Book" font.



Fig. 1



In figure 2, the text has been assigned a menu style of "Bold." Note that the text *appears* to be bold. If this item were printed to a PostScript device, it would print as above in figure 1.



Fig. 2



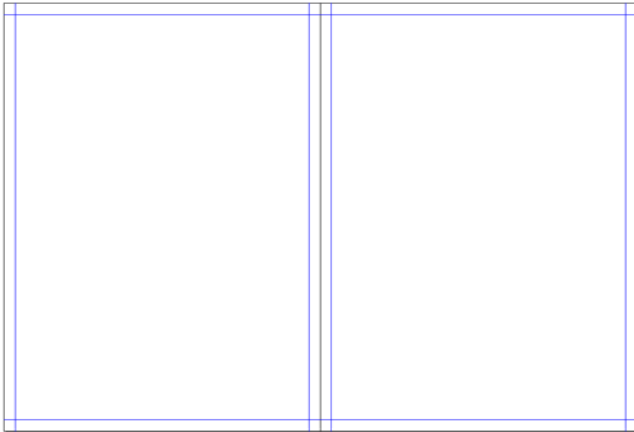
Figure 3 is the correct bold assignment for the Leewood font. The Leewood bold font was selected from the Font menu.



Fig. 3



Layout



The blue margin guides bound your image area.

Text and graphics must not extend beyond the defined image area.

! Do not modify the size of your template without notifying Citizen Printing first!



Templates

Citizen Printing will supply you with a template. Your template is designed specifically for your publication.

Your template is built to the *trim* size of your publication. All the pages of your publication must be the same exact size. An incorrect page size will cause problems during the imposition production.

Create all of your publication pages from the same source template file. This will help to keep your page design consistent from page to page.

Build your publication as facing pages. Do not build your publication in printer spreads. Also, do not build your reader spreads on a spread document.

Bleed Information

Standard bleed at Citizen Printing is .25".

All Publications bleed at: .25"

Contact your Tech CSR if you have questions about setup for bleed.

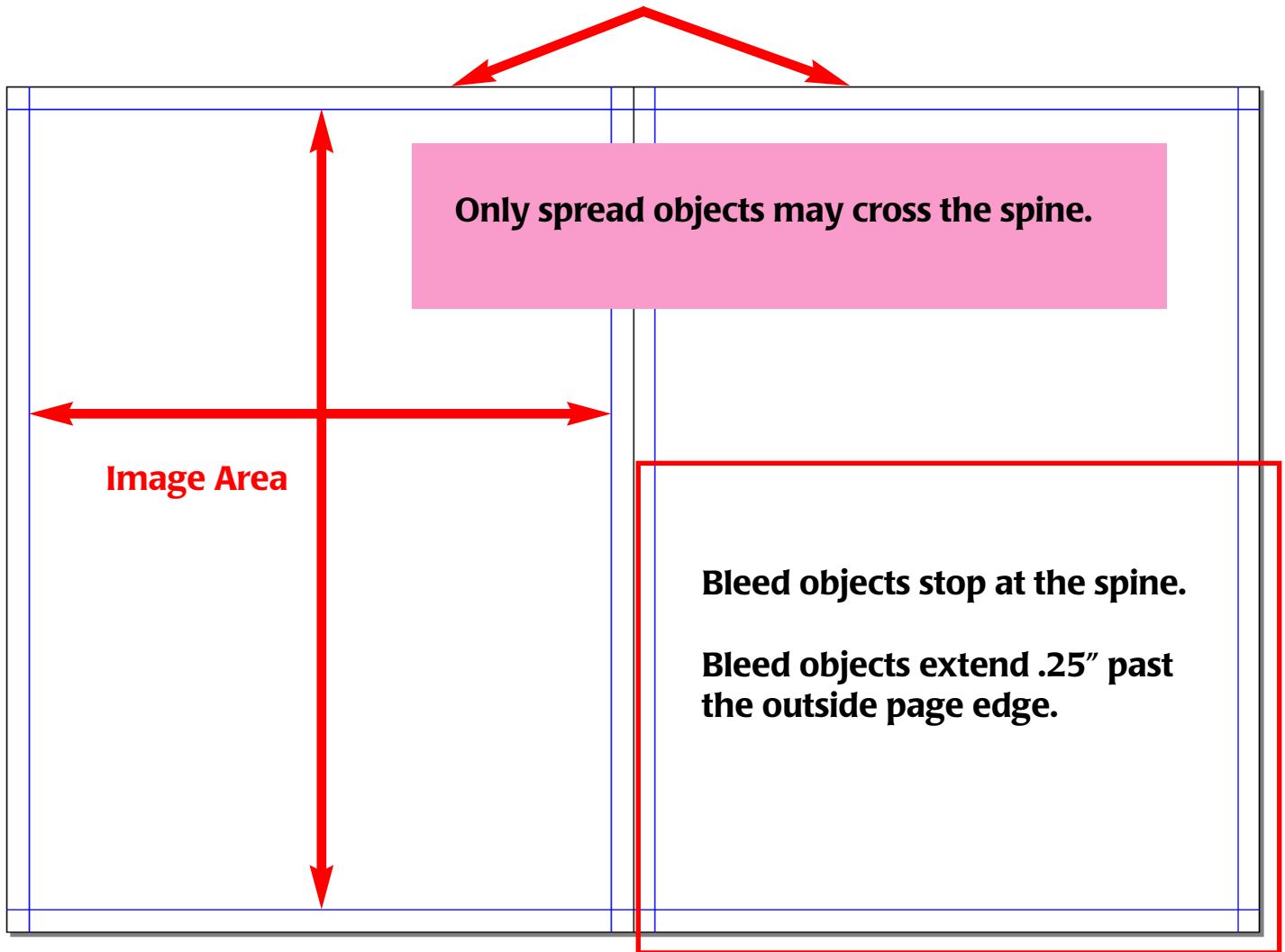
Spreads

A spread ad can be defined as an ad that crosses from the left page, over to the right, consuming the entire image area on both pages.

Build your spread ads across two facing trim pages. Do not use a single page "spread" setup to create your spread ads.

Layout

This is the trim edge of your page.



Page size matches trim size of publication.

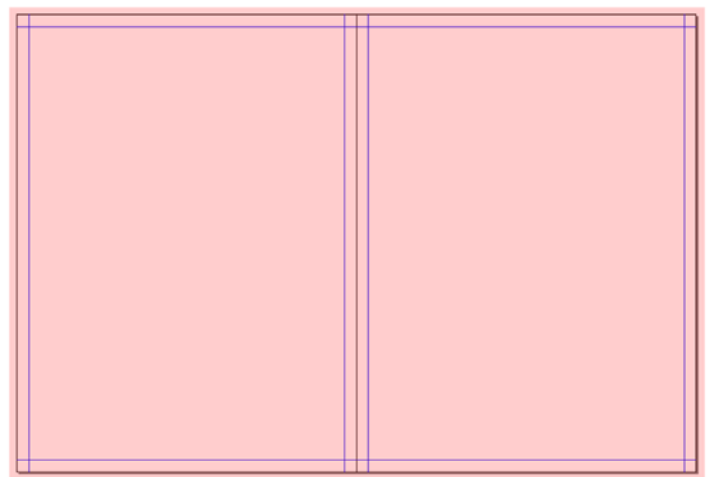
Image area is centered within trim.

Bleed objects extend .25" past the outside page edges.

A bleed object should not extend past spine unless the object is a spread.

All non-bleed objects must stay within the image area. This includes folios.

Do not place objects between the image area and trim edge, this includes folios. Only bleed objects may extend past image and trim.



A spread bleed ad should extend .25" past the top, bottom, left and right page edges.

Scanning

The optimum input resolution for grayscale photos is 200 d.p.i. @ 100%

Grayscale Chart @ 200 d.p.i.

100%	200 d.p.i.
200%	400 d.p.i.
300%	600 d.p.i.
400%	800 d.p.i.
500%	1000 d.p.i.

The optimum input resolution for color photos is 266 d.p.i. @ 100%

Color Chart @ 266 d.p.i.

100%	266 d.p.i.
200%	532 d.p.i.
300%	798 d.p.i.
400%	1064 d.p.i.
500%	1330 d.p.i.

! Do not scan huge images only to reduce them to 10% upon placement. Scan your images to the proper size to keep your file and workflow optimized.

Optimum Input Resolutions

Input resolution is the amount of resolution that your images need in order to print correctly. Too little resolution, and your images will bitmap. Too much resolution, and your files become unnecessarily large. Large files will slow your scanning, layout and imaging production, without any added value. Bigger is not better. Increasing your input resolution will not improve the quality of your image.

Your optimum input scan resolution is determined by your halftone screen frequency.

Grayscale pages are output at a screen frequency of 100 l.p.i.

Color pages are output at a screen frequency of 133 l.p.i.

If your halftone screen is 100 l.p.i., then your optimum input resolution is 200 d.p.i.

If your halftone screen is 133 l.p.i., then your optimum input resolution is 266 d.p.i.

Enlarging Images

The input resolutions above are calculated at 100% of the size of the image that you're scanning. In most situations, specifically for 35mm slides and negatives, you will need to increase the size of your scan. As you do so, you will need to add more resolution to obtain a quality scan. The enlargement formula is as follows:

$$200 \text{ l.p.i.} \times \text{enlargement \%} = \text{resolution}$$

$$266 \text{ l.p.i.} \times \text{enlargement \%} = \text{resolution}$$

Luckily, most scanning software automatically calculates the input resolution as you define your enlargement value.

Bitmapped Images

Scan bitmapped images at 800 d.p.i.

Photoshop Setup

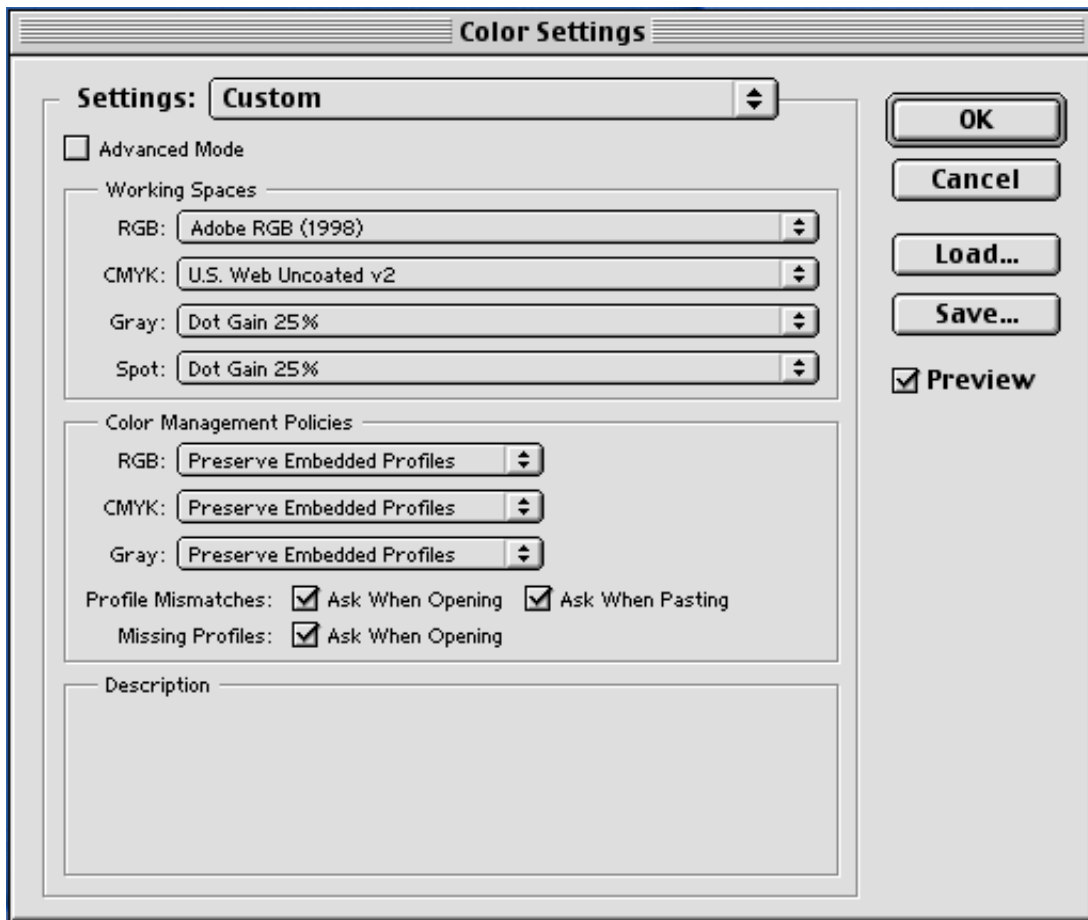
Color Management

Photoshop versions 6.0 and above automatically use color management. Because of this fact, it is risky to ignore the color management features of Photoshop.

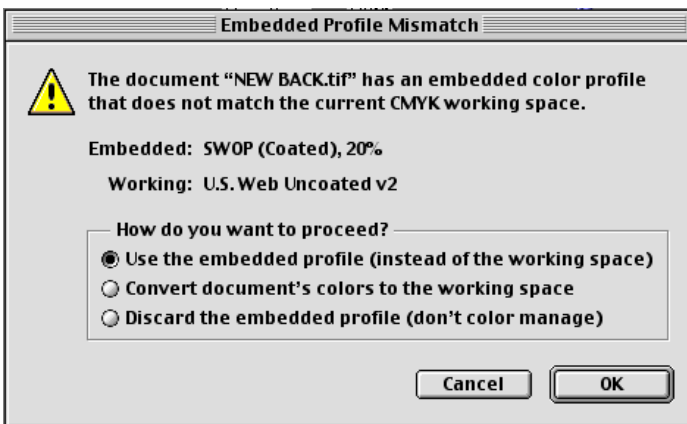
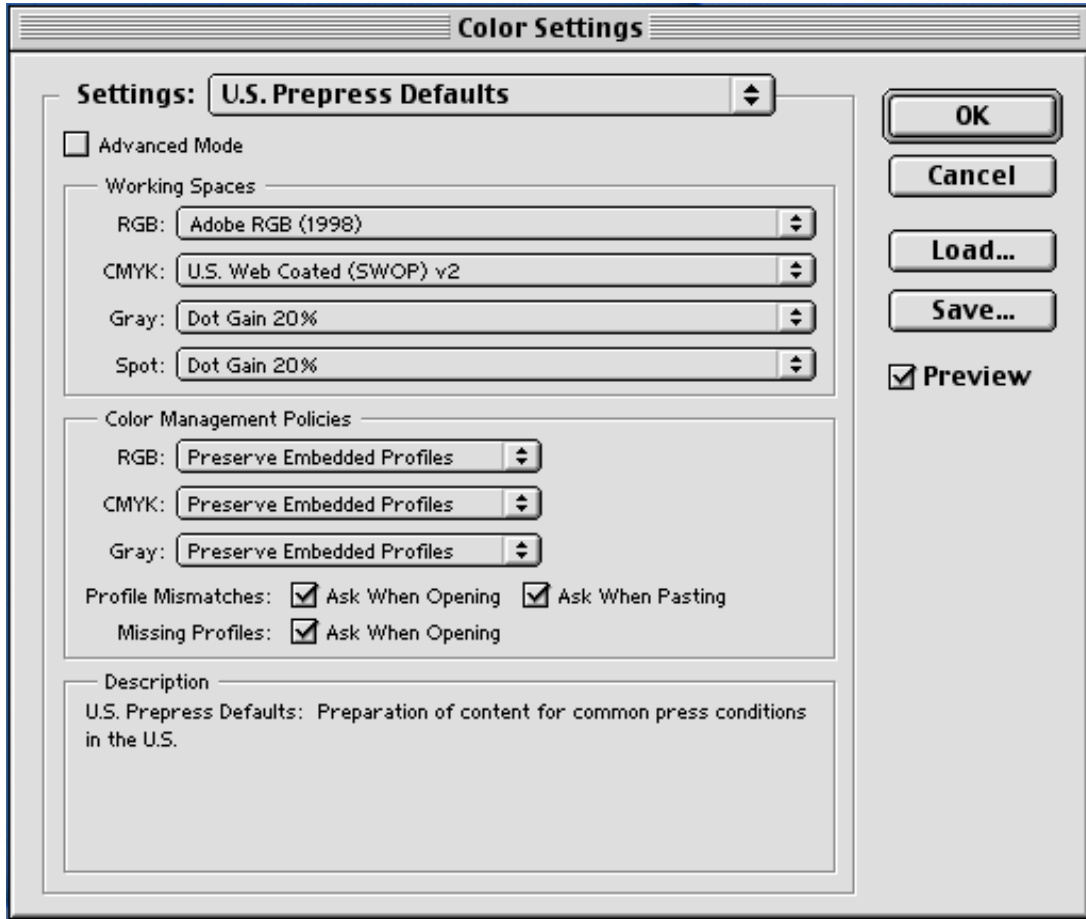
The information in this section is intended to be used as a general guide for Photoshop setup. At the very least, your setup should match this information.

The setup for a customized color management system may not match this information. However, any customized system must be setup to type of printing done at Citizen Printing. Contact your Tech CSR for more information.

Setup for Uncoated Paper Stock



Setup for Coated Paper Stock



Color Management Policies

When the "Preserve Embedded Profiles," and the "Ask When Opening" options are selected, Photoshop will prompt you when opening a file with a mismatched or missing profile.

It's a good idea to first view the file as intended by the creator, so use the embedded profile and view the image. After viewing the file, use the "Convert to Profile" command to convert a mismatched profile to your working space.

Grayscale & Color Images

Scan your grayscale images as color first, and then convert to gray. You will retain more detail in your image this way.



Do not use the DCS format!



Convert your RGB scans to CMYK.

Grayscale Specifications

Scan all grayscale photos at an input resolution of 200 d.p.i. Scanning at a higher input resolution will not improve the quality of your scan.

Grayscale pages are output at a screen frequency of 100 l.p.i.

Save your grayscale images as TIFF or EPS. Do not assign any compression to your TIFF images.

Never save a file in the PICT format! PICT format graphics cannot be used for high resolution output.

Do not place color photos or graphics on a grayscale page. Convert your objects to grayscale in Photoshop or Illustrator before you place them on your page.

Bitmapped Images

Scan your bitmapped images at 800 d.p.i.

Color Specifications

Scan all color photos at an input resolution of 266 d.p.i. Scanning at a higher input resolution will not improve the quality of your scan.

Color pages are output at a screen frequency of 133 l.p.i.

Save your color images as TIFF or EPS. Do not assign any compression to your TIFF images.

Do not save your images in a DCS format. This is a format for separated output. Citizen Printing uses a composite output imaging system, so DCS files will not work.

Most scanners scan in RGB. You must convert your RGB scans into CMYK before you place them in your layout pages.

! *There is a noticeable color shift when a spot color is converted to CMYK.*

It's impossible to match spot and process inks on press, no matter what they look like on your monitor!

! *A duotone on a CMYK page is really a quadtone. Keep this in mind when toning your images.*

Your Color Palette

It's important to understand the difference between spot and process colors when building graphics and pages for your publication.

Spot inks are very different from process inks, therefore, using one in place of the other often produces unwanted results.

If your publication prints as CMYK, then use CMYK colors.

Do not choose your colors from your monitor. Use the swatch books that can be purchased from many graphic suppliers. Coated and uncoated stocks are available.

Spot Color

There are many things to consider when selecting to print with a spot color.

It is impossible to match process and spot inks on press.

Build all of your graphics and pages using the exact same spot color. Pay close attention as you switch from application to application.

Do not blend spot inks with other spot inks.

Do not blend spot inks with black.

Duotones may only be created with Photoshop 5.02 or higher.

Notify Citizen Printing immediately when you decide to use a spot color in your publication.

Contact your Tech CSR if you have questions about spot color.

Basic Trapping

Knock Me Out!

This is how the text will appear on your Quark page.

Knock Me Out!

This is how the text will print to a PostScript printer.

Citizen Apogee Trapping

Our Apogee imaging system is programmed to honor application trapping. What this means is that our system will honor the trapping that you assign to the objects that you create.

Helpful Hints to Avoid Trapping Problems

Black text in Quark is defaulted to overprint. Keep this in mind when using a black text object for a shadow. Your "shadow" will overprint unless you command the color text or black text to knockout.

Build your graphics using a natural trap. A natural trap is where a percentage of the background color is added to the overlaying objects. For example, if you have a yellow background with a cyan object on top. Add 10% yellow to the cyan object.

Design with your final product in mind. Newsprint is a very absorbent material on which to print. Remember this when designing and creating graphics and ads.

Do not reverse text smaller than 12 points.

Do not apply a color blend to text that is smaller than 12 points.

All black text 12 points and under should overprint.

Preparing for PDF

The specifications in this booklet are intended to be used as a guide for preparing files that are going to be processed into PDF.

The PDF files that you submit to Citizen Printing must be complete and correct. All ads, photos and graphics must be in position. All fonts must be embedded.

Preflighting

We encourage you to incorporate a preflight process into your workflow. You are responsible for the quality of all files that are submitted to you for production. Preflighting submitted files should be a standard part of your production process. You should also preflight your pages before you submit them for production to Citizen Printing. This will help you to avoid customer alteration charges, and keep your job on schedule.

Hints to Avoid Common Problems

Organize your fonts!

Examine all submitted files. Do not assume that they are correct and ready for production.

Don't wait for deadline to examine your advertiser files.

Reject files that are incorrect.

Follow scanning resolution requirements.

Convert all RGB graphics to CMYK.

Use the Citizen job options when Distilling PDF files.

Use the Apogee PPD as your designated printer.

Please reference the "PDF Workflow" booklet for information about processing your layout pages into PDF files. Contact your Tech CSR if you have any questions.