

Introduction

In order to serve our customers better, our Rockaway Division Prepress Department has designed this guide to be used as an aide to prevent common and easily avoided errors that cause unneeded delays and problems. This guide encompasses the electronic prepress workflow and offers suggestions that will enable you, as our customer, to achieve a faster and more reliable production workflow.

According to a Graphic Arts Technical Foundation (GATF) survey, almost half of all files supplied to prepress from designers will fail. This, in part, is due to the lack of communication between design and production. In this age of software upgrades, technology allows for new and exciting design software to be released with short amounts of time to research and develop processes to ensure credible final output. Our intent is that this guide will open a line of communication before the design process has even begun; providing a roadmap for a smooth trip through production.

As always, we will happily answer any questions or comments concerning this guide, as well as any technology based queries. Please contact your Customer Service Representative and they will be happy to direct all questions and concerns to our experienced support staff.

*Thank You,
Phoenix Color Prepress
Rockaway Division*



Rockaway Division

File Preparation

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- Layout

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Software Guidelines

Phoenix Color takes pride in our ability to accept most major file formats and provide positive results. However some software versions and manufacturers; while reputable in their field, do not make products suitable for high-end printing and manufacturing. We strongly advise you consult your Customer Service Representative before upgrading to entirely new versions of industry standard software, since patches and errors are not apparent or available until a month or two after a new release.

Software and Versions currently supported and accepted at the Rockaway Division:

Software	Versions
QuarkXPress™	4.0 OR HIGHER
Adobe® PageMaker®	6.5 OR HIGHER
Adobe® Framemaker®	No Support
Adobe® InDesign®	2.0.1 OR HIGHER
Adobe® Photoshop®	5.5 OR HIGHER
Adobe® Illustrator®	8.01 OR HIGHER
Macromedia® Freehand™	8.0 OR HIGHER
Adobe® Acrobat®	4.05 OR HIGHER
Microsoft®	No Support* (All Products)
Corel™	No Support**

**Any Microsoft product will not be accepted, as PDF or native. These applications were not meant for high end output and are unpredictable, at best, in output.*

***Corel™ image files will be accepted as long as they are of proper resolution and file type (TIFF, EPS) and are placed in an accepted layout application. No support, in this case, implies that we will not modify these files.*

Software Guidelines...cont'd.

If your title is a multiple reprint, and the files were created in earlier versions of these software titles, you will need to open your files and re-save them in a newer version. This policy includes older image files contained in these files or images which may be on file and placed in new documents. Modern raster processors may not successfully manage outdated technology.

Fonts

Missing fonts are the most common reason for file rejection, often due to the large number of fonts involved in most book designs. Several software companies have developed applications which make collection of output files relatively easy, most notably with FLIGHTCHECK® Collect. This will not only collect the fonts, but also the image and layout files, while organizing everything into one folder.

The following is a good guideline to avoid costly down time:

- *Please send all of the fonts used in the creation of your documents.*
- *Please do not send extraneous or unused fonts.*
- *We recommend the use of PostScript® (Adobe Type 1) fonts. These are the tried and true, industry standard fonts. While True Type and Open Type fonts can and will produce high quality output, they are more likely to fail as compared to Type 1. All other font types should be avoided.*
- *When using Type 1 fonts, be sure to include both printer and screen fonts. In comparison, True Type and Open Type have only one file containing both screen and printer information.*
- *If an artificial font style is used in your layout program, be absolutely certain that the actual font for that style is loaded in your system. This will cause unexpected results when the actual font is not loaded.*
- *All fonts used within images (Adobe® Illustrator®, EPS) must also be included. Furthermore, embed the fonts in the document when saving as or create outlines of the fonts. Please be advised that creating outlines will convert the text to images and modification will not be easy, but this is the most recommended method.*
- *Do not stylize fonts in QuarkXPress™ (i.e. Faux Bold, Italic, Caps). Use the proper font for the desired font face.*

Images

Images come in all shapes and sizes, from halftones and duotones, to line-art and vector graphics. Since personal choice and taste have so much to do with design and scanning, the following suggested settings will ensure the intended design vision will show from proof, to plate, to printed sample.

File Formats: *We support both EPS and TIFF. These are the industry standard. Although we accept JPEG and GIF files, we discourage the use of these files for resolution and quality reasons.*

Halftones: *We suggest scanning halftone images at 300dpi, although your halftones may contain some elements of line-art. If this is the case, you want to consider a higher setting of 400-600dpi. In scanning, please be sure that any screened image is descreened by your scanning device. If not, moire patterns will appear. We recommend saving as a Grayscale TIFF.*

Duotones: *From a design standpoint, duotone images are probably the most open to argument. If you would like a good guide set your duotones to our preferences, please contact your Customer Service Representative, who will send you a copy of our duotone guide. As for file type, you are limited to a raster Adobe® Photoshop® EPS. Please be sure that the color naming conventions match your layout program.*

Color: *Please be sure that all color images are CMYK or spot colors and gray images are either grayscale or black only. RGB, LAB or INDEX color images will be converted by our workflow with no calibration. This could result in a color shift from the original file. Spot colors are fine, as long as a consistent naming pattern is followed.*

Images...cont'd.

Line-art: Also known as *Bitmap files*, line-art should be scanned a minimum of 800dpi for maximum smoothness and quality. We recommend saving as a *bitmap TIFF*.

Vector Illustrations: Vector art is a favorite of the prepress world. Generated by Adobe® *Illustrator®* or Macromedia® *Freehand™*, it is known for its ease in scaling and output. Please supply vector art as an *EPS* if it is being used in *QuarkXPress™* or Adobe® *PageMaker®*. Adobe® *InDesign®* will support the native “*ai*” file made by Adobe® *Illustrator®*, which is recommend if transparencies are used.

Embedded Images in Illustration Applications: These images must be *CMYK* and proper resolution for high resolution printing. Spot color naming must be consistent with their names in other applications used to create the layout (i.e. *QuarkXPress™*, Adobe® *InDesign®*).

Gradients

Rockaway Division's state of the art equipment enables high resolution printing, which exaggerates imperfections in customer supplied files, such as banding in gradients. The following recommendations should be used to avoid banding:

Gradient Blends not created by a raster program (Adobe® Photoshop®) require PostScript® Level 3 for optimum output. If a PDF is to be supplied, it must be made using the Creo Distiller Assistant available at:

www.phoenixcolor.com/tech_info/downloads.html.

This will convert the gradient from a linear blend to a smooth shade.

- *Use a high resolution output device (2400dpi) when creating your PostScript files. Make sure it is capable of Postscript Level 3 and it is selected when PostScripting.*
- *Increase the percentage change in shade of the blend.* Increasing the percentage of change will increase the number of available shades that can be used to print the blend, and the width of each band will decrease.*
- *Decrease the length of the blend.* Decreasing the length of the blend will decrease the width of the individual halftone bands used to print it.*
- *Create the blend in an art application (Adobe® Photoshop®, Adobe® Illustrator®). Page layout applications (QuarkXPress™, Adobe® PageMaker®) use different techniques for creating blends which may produce banding.*
- *Use the Creo Distiller Assistant plug-in for Distiller, available on www.phoenixcolor.com/tech_info/downloads.html.*

Gradients...cont'd.

- *Select Convert Gradients to Smooth Shades in the Advanced tab in your Distiller's Job Options.*

**In general, the fewer shades of gray available to simulate a blend and the longer the length of the blend, the more likely it is that bands of color or gray will be visible when the blend is printed.*

Layout

Layout is the point of design when the vision of the designer becomes reality. It is also the point where the smallest flaw can cause major repercussions in the printing process. Normal variations in printing and binding call for regulatory bleed margins and placement guidelines. These industry standard specifications should be followed to provide assurance of final product quality.

Bleed should be set at 1/8".

Images and Text that do not bleed should be placed no closer than 1/4" to the trim.

The Fewer the Files, the faster your title will move through production. For example, 1 file of 32 pages will take considerably less time to postscript, distill, preflight and impose than will 32 files of one page.

Sizing should be applied in the art treatment application that created the art. The layout program will only preview the size and send the entire piece of art to the output device, along with a notation that states the art should output at a percentage of its original size; creating enormous files.

Rules should be no less than .25pt, hairline rules should not be used. Screened rules must be no less than .6pt.

Type should be no smaller than 6pt. This includes footnotes, fractions and copyright page information. If supplied smaller, the type could lose detail or plug up on press.

Layout...cont'd.

Color naming should match the conventions used in your art programs. Be careful of Pantone® CV, CVC and CVU. The naming should be consistent from the art program to the layout program. For example, if a CV suffix is used in a color from art program to identify a specific color, the same CV suffix should be used in the layout program.

Third Party Extensions used in the layout must be supplied along with the files.

Crop Marks must be present on all final files, including PDFs. They should be offset by at least 1/8" from the bleed, a total of 1/4" from the trim.

Final Files

Once the design process is complete, the type of final files to supply a vendor is a major decision. Whether a PDF or the actual layout files are supplied, Phoenix Color is committed to providing you with the best possible support we can provide. We have several recommendations and guides posted on our website:

http://www.phoenixcolor.com/tech_info/downloads.html

Layout Files; such as QuarkXPress™, Adobe® PageMaker® and Adobe® InDesign®, are more than acceptable. Please be advised that all images and fonts used must also be supplied.

PDFs should be created using the guidelines provided on our web site. We recommend using the Creo Distiller Assistant, PDF version 1.3 and Acrobat® version 5.0. We also have a printed guide to creating PostScripts® and PDFs. Contact your Customer Service Representative for a free copy.

File Transfer may be supplied to us in variety of ways. We accept CD, Zip, Jaz and 3.5" disks; along with Internet based transfer. We have our own FTP (File Transfer Protocol) site, which can be accessed by contacting your Customer Service Representative. We can also access any designer's FTP site or WAM!NET. Any files sent via Internet must use a method of compression, i.e. Stuffit, Zip, Binhex. We do require a hard copy proof to be supplied by courier. We do not recommend the use of e-mail for any file transfers.

Corrections

Corrections should be made by the designer and supplied as final layout files or as a PDF. If layout files were originally supplied, the corrections can be made by the Prepress Department at an hourly rate. If a PDF was originally supplied, only simple text corrections and slight image modifications can be made. Whenever possible, the corrections should be made to the original files and new PDF files should be generated.

If the corrections are being supplied as a PDF, they should be supplied as individual pages. The only exceptions are as follows:

- More than one page in a row with corrections. This range of pages should be supplied together.*
- A large amount of pages. This will be a judgement call made by the designer. If an extensive amount of single page PDF files are supplied to be cut into the original files, an hourly rate may be assessed.*

Output

All of Rockaway Division's work is output direct to plate. We use high-end digital workflows and raster output devices to RIP, trap, impose, and proof your files quickly and reliably. We offer CopyDot scanning and book digitization to bring old film and printed matter into the digital world. Our workflow is designed to deliver optimum results and quick turnarounds as needed.

Proofing Options:

- *Digital Color Proofs - Proofs in book form*
- *Color Contract Proofs - Upon Request*

Testing & Preflighting

Testing

If you are new to the Rockaway Division, or you have concerns about your design being too complex for reliable output, you may want to submit a sample file for preliminary testing. Upon receipt, the file will be tested to indicate potential success or failure in the production of proofs and plates.

These “test” files should be complete and representative of all the design methods and formats used throughout the title. These files should be no more than 8 pages in length. The testing will include a basic Preflight and the file will be introduced into our workflow. If the file produces usable files, we will advise to proceed with production. In the event of failure, we will advise of possible solutions that could rectify any issues you may be facing.

A report in a PDF format will be created and will be made available via e-mail or hardcopy within 5 working days of receipt of the test files. If proofs are desired, please notify your Customer Service Representative. In the case of failure, we will offer recommendations for changes in format or layout that will aid you in your production of problem free files.

Preflight

Upon receipt of the final working files, a procedure known as Preflight is performed. In this procedure, we will take the final files and check for any errors and missing elements. We will look for font and art errors, along with printing standard discrepancies in the design process. In addition, the files will be checked using FLIGHTCHECK® and/or TWiST's PS/PDF Check for layout files or PDF files. This is where any errors will most likely be found. Upon discovery of these errors, your Customer Service Representative

Testing & Preflighting...cont'd.

will advise you of these issues along with a solution. The final step of the Preflight process is the introduction of the files to our workflow, which upon request, a Color Contract final proof can be produced.

Although we wish we could, we cannot find and foresee all issues and possible failures that may occur. Even though a file may pass the Testing and Preflight processes with no errors, unforeseeable issues may still arise during the process of prepress and printing.

Please Remember:

***OUR PREPRESS PERSONNEL CANNOT CHECK EVERY PAGE
OF YOUR DOCUMENT.***

***THE ULTIMATE RESPONSIBILITY FOR CONFORMANCE TO THESE
SPECIFICATIONS WILL REST WITH THE PERSON PREPARING THE FILES.***

Digital Proof Production

HP Proof: Color Proof for color break and content, not for color approval. This proof can be loose or booked up to simulate a folded and trimmed book.

Epson Proof: Color Proof from an ink jet printer. This can be used for color approval for press.

Fuji Proof: Color Proof which has a dot generated to match our printing process on press. This is a contract proof for color approval.

Digital Press Proof: Color Proof with a dot generated to simulate color printing on press. This can be used for color approval for press.

***Please copy and submit this completed checklist and send it along with the final files for every job.**

Supplied File Checklist

Customer: _____

Title: _____

Date: _____

File Name	File name follows a clear naming convention	Yes	No	N/A
	File name clearly identifies the page(s) it contains	Yes	No	N/A
Fonts	<input type="checkbox"/> PostScript® <input type="checkbox"/> True Type <input type="checkbox"/> Open Type Fonts in use	Yes	No	N/A
	All fonts are embedded	Yes	No	N/A
	Artificial Styles used (Artificial Styles may not output properly)	Yes	No	N/A
Images	Images are saved as EPS or TIFF	Yes	No	N/A
	Raster Images are of high resolution (minimum 300ppi)	Yes	No	N/A
	Scans have been descreened	Yes	No	N/A
	Images are either CMYK, Gray or Spot Color (No RGB)	Yes	No	N/A
	Spot Color naming follows a clear and consistent pattern	Yes	No	N/A
Bleed & Trim	Files contain adequate bleed (1/8" inch)	Yes	No	N/A
	Crop marks do not print on top of bleed	Yes	No	N/A
	Image and text (excluding bleeds) placed no closer than 1/4" to trim	Yes	No	N/A
Page Layout	All pages in document are the same size	Yes	No	N/A
	Document is the correct size	Yes	No	N/A
	All perforations are represented by dotted lines	Yes	No	N/A
	Margins are specified to a clear point	Yes	No	N/A
	Spot Color naming matches the images in use	Yes	No	N/A
Proof	Proof date matches the final electronic file date	Yes	No	N/A
	Proof shows crop marks	Yes	No	N/A
	Proof is printed at 100%	Yes	No	N/A
PDF	PDFs were generated with no errors	Yes	No	N/A
File Transfer	Files are to be supplied via e-mail or FTP and are compressed	Yes	No	N/A
	Files are to be supplied on disk and contain a list of files present	Yes	No	N/A
Misc	Only the Final Files have been provided	Yes	No	N/A
	Software versions are current and meet Phoenix standards*	Yes	No	N/A

* Standards can be found at www.phoenixcolor.com/tech_info/downloads.html

Conclusion

By utilizing these recommendations in file preparation, your files will be ready to be submitted to our plant for testing and production. This guide, along with careful research into any upgrades, will help you in the design process to avoid issues in the printing process. We look forward to working with you in our future together.

*Thank You,
Phoenix Color Prepress
Rockaway Division*