



# Schumann Printers, Inc. Prepress Guide

This guide is for our customers and our customer's prepress suppliers. If you require further assistance, please contact your Schumann Printers, Inc. Customer Service Representative.

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***Schumann Printers, Inc.***

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# Supplying Files...

Schumann Printers, Inc. (SPI) will do everything it possibly can to ensure that the files you provide print exactly as desired. Every file submitted to SPI gets run through preflight to catch potential problems before any soft or hard proof is ever made.

## *PDF Files*

To download our recommended PDF settings, go to [www.spiweb.com/download.html](http://www.spiweb.com/download.html) When supplying PDF files, use a consistent naming convention that makes the files easily identifiable. Start with an abbreviation for the project, then indicate the issue date or number. Next, put an abbreviation for "page" and then the page number.

SPECFALLPG12.pdf  
SPECSEPTPG12.pdf  
SPEC09PG12.pdf

When sending a revised file, name it exactly the same as the original. The new file will overwrite the original file, and eliminate any possibility of multiple files existing for one page.

Version names or letters can go after the page number. There is a 27 character limit.

## *Sending Test PDF Files*

We recommend that test PDF files be submitted whenever appropriate. They'll be thoroughly checked for any potential problems that could cause headaches, or result in extra charges.

## *Native Files*

Following the SPI guidelines will virtually eliminate the problems that cause delays and extra charges. Any non-PDF files are considered native files.

- SPI supports the latest versions of most popular desktop publishing software applications. If in question, contact your CSR.
- We strongly encourage the use of desktop publishing software and do not support programs such as MS Word and Excel.

## *File Prep (the basics)*

- When supplying native files, use one page layout file whenever possible. The fewer the better. Preflight will be faster and there is less potential for page set-up errors.
- Name all page layout files with the pages they contain. If the document contains pages 8 through 24, then label the document "8-24". Add any custom naming after the page numbers.
- Images may be named as you like, but please keep the names as short as possible and avoid using the following characters: ([ ] ! / \ = \* + . < > : ; " ,) Also, be sure no two files have the same name.
- Allow 1/8" of bleed beyond the trim size of your page. Failure to allow at least 1/8" of bleed may result in white showing on trimmed edges.
- All critical copy must be at least 3/16" from the final trim to avoid the possibility of being trimmed off.
- A "rich black" color should be used to avoid a "washed out" appearance whenever large text, graphics, boxes or backgrounds are to print as black. Use the values of 40% cyan, 30% magenta, 30% yellow and 100% black, to create a "rich black".
- Include all fonts and images with native files submitted for output.
- Send only the files needed for output. Do not send "For Placement Only" files, or old files that are no longer needed.
- Clearly identify all disks and their contents by the project name and provide a printed directory of each disk.
- Send content accurate proofs for each native page. No color accurate proofs are necessary.

## *Image Specifics*

- Color and grayscale images should have a final resolution of twice the line screen. For example, images used in a project that is printing at 150 line screen should be 300 Dpi (dots per inch). For line art, 1200 dpi is recommended. "Final" or "effective" resolution means the resolution after any scaling is applied in the page layout program.
- In Photoshop, Color Management should be off, or set to North America Pre press 2.
- When saving your Photoshop files, the TIF or EPS format is recommended. When saving EPS files, don't use the Postscript Color Management option if it is available.
- Be sure to "embed" any images placed in a vector graphics file (such as Illustrator).
- Be careful if scaling more than 120% in your page layout program. The image quality could deteriorate noticeably. Reducing an image can improve its quality.
- If you are using a "spot" color in your illustration program, be sure that any usage of that color in the page layout program references the color with the exact same name. Example: Pantone 186 CV is not the same color as Pantone 186 CVU.

## *Colors*

- Use only CMYK process colors for any four color project. If your project is using a fifth, or "spot color", be sure to designate it as such in your layout program. Also, be sure that any usage of that color in an illustration program references the color with the exact same name. Example: Pantone 186 CV is not the same color as Pantone 186 CVU.
- A "rich black" color should be used to avoid a "washed out" appearance whenever large text, graphics, boxes or backgrounds are to print as black. Use the values of 40% cyan, 30% magenta, 30% yellow and 100% black, to create a "rich black".
- Any specified color must not exceed a total tonal value of 280. That is, the percentage of tint of each color (C+M+Y+K) when added, must not exceed 280%.

## *Font Usage*

- Choose the correct type style from the fonts in your font menu. For example, if you want to use a bold typeface, choose the bold version from the font menu. **DO NOT** choose "bold" from the type style menu or palette.
- For black body text, use only the color black. Do not use a "rich" or "false" black.
- To make reverse type readable, avoid using type that is too small or delicate. Use a font size of 8 points or larger to guarantee readability.

## *Document Page Size and Margins*

- The document size should match the final trim size of the job. SPI requests that you use a standard publication size or smaller.  
Digest size 5.375" x 8.375"  
Magazine size 8.375" x 10.875"  
Tabloid size 11" x 17"  
Pages larger than these may not efficiently fit on our equipment and may result in additional charges.
- Allow 1/8" of bleed beyond the trim size of your page. Failure to allow at least 1/8" of bleed may result in white showing on trimmed edges.
- All critical copy must be at least 3/16" from the final trim to avoid the possibility of being trimmed off.

*The requirements noted here are general guidelines. There may be special circumstances or requirements for each particular job. Please feel free to contact your Sales or Customer Service Representative with any questions.*

# Color Management

Color management is the controlled conversion between the color representations of various devices. Those devices; scanners, digital cameras, monitors, computer printers, and presses, all output color differently. Color management simply aims to show an accurate color representation of the final piece right from the beginning.

Start with the calibration of your monitor. Mac users can use the calibration option in the system preferences. Follow the "Expert Mode" instructions. When choosing the white point, select the option that best matches the color of the paper your piece will be printed on (typically around 5500). If you need assistance, or better color accuracy, contact your CSR for more information.

The next step is the color management setting in the applications that you'll be using. When available, select the North America Prepress 2 option. The CMYK profile within that set will be U.S. Web Coated (SWOP) v2.

Schumann Printers, Inc. will handle the rest of the color management. We use the latest in color management tools and processes to ensure that we hit the color target that you were aiming for from the beginning.

## Proofing

Schumann Printers, Inc. utilizes "state of the art" offset presses and prepress solutions to produce the finest printing quality. As a member of the Printing Industry of America (PIA), Schumann Printers, Inc. is a strong proponent of SWOP (Specifications of Web Offset Publications) and GRACol (General Requirements for Applications in Commercial Offset Lithography) which provide recommended specifications developed by a joint agreement of print buyers, publishers, ad agencies, manufacturers, prepress providers and printers. These parameters have proven to produce an excellent quality level, and any deviations from these specifications is highly discouraged.

## *Expectations*

Schumann Printers, Inc. can provide you with a SWOP certified color X-Matchprint Digital Proof or a SWOP calibrated ink jet proof (Epson 4800 with GMG software).

Because of the variety and availability of color proofers and printers on the market, supplied color proofs must meet certain standards of color reproduction. The type of proof you supply may vary in cost and quality usually according to its level of integrity in simulating the appearance of the anticipated press work. Example: some continuous-tone ink jet proofers can simulate the final presswork color and be used as a contract proof (such as our Epson 4800), while other ink jet proofers are only adequate for content checks or general color reproduction. The best option is a proof that provides content, integrity and excellent color match. When viewing color on screen, on a hard proof, or on the printed piece, keep in mind that monitors and printing devices produce color by entirely different means and have different color range capabilities. Monitors use the RGB (red, green and blue) color space to transmit color. Printing devices use CMYK (cyan, magenta, yellow and black) inks to produce color. The color space, or gamut, is different for each method.

Please keep in mind that most digital color proofs are made at 300 dpi resolution, while press plates are imaged at 2400 dpi resolution.

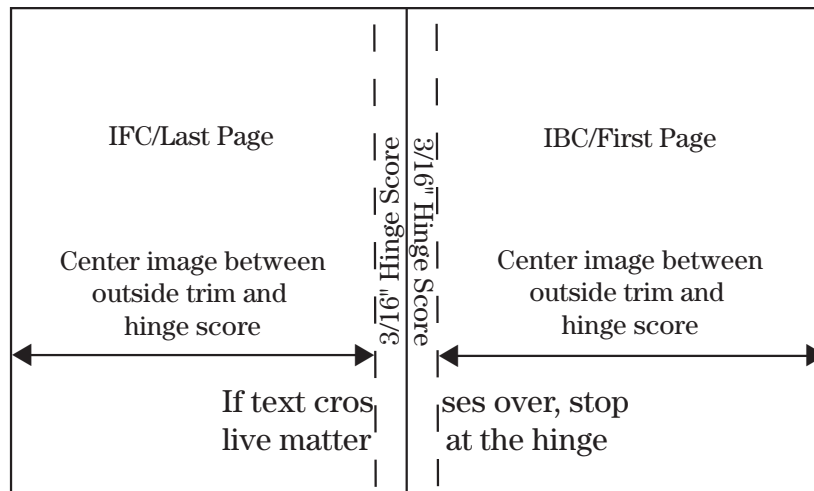
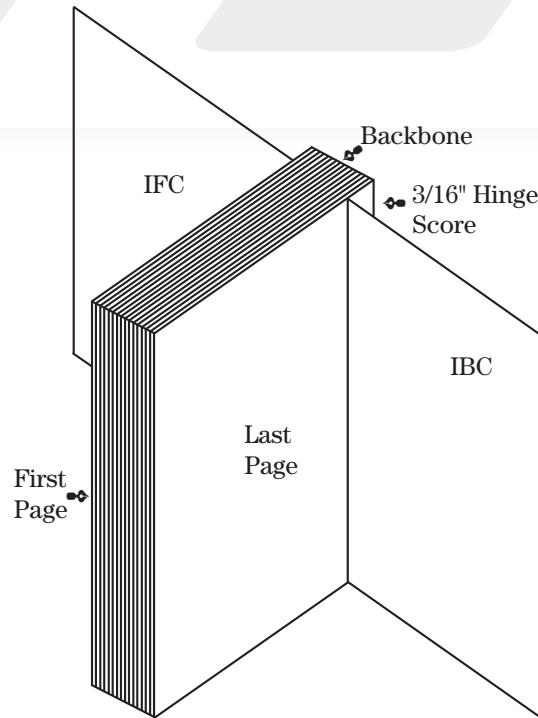
If you will be supplying color accurate proofs, the proofs must be made from the same digital file that is furnished to SPI, and the proofs must also be calibrated to SWOP standards. Those standards can be found here:

[www.swop.org/certification.html](http://www.swop.org/certification.html)

Schumann Printers, Inc. also provides a Remote proof of every page. This proof is completely digital and can be viewed online anywhere at any time. Perfect for tight deadlines, the Remote proof can be viewed just moments after your page has been processed.

# Perfect Bound Covers

When creating the cover document for your perfect bound publication, please remember to allow for the spine when determining your page width. The width of your spine will be determined based on the stock weight that your publication will be printed on and the number of pages your publication contains. For more information regarding spine thickness formulas, please contact your SPI Customer Service Representative. To allow for the 3/16" hinge score, follow the guidelines below for positioning pages.



# Prepress Glossary

**Bleed:** Extra image that extends beyond the edge of the page. Any time an object goes to the edge of a page, the object should extend 1/8" beyond the edge so that when the page is trimmed, small variations in the trim will not result in a white line at the edge of the page.

**Color management:** Controlled conversion between the color representations of various devices.

**Dot Gain:** The darkening of an image when it is printed on a press, because when the ink hits the paper it spreads out. Dot gain is greater on uncoated paper than on glossy paper, because the ink soaks in to uncoated paper.

**For Position Only (FPO):** A low-resolution image used only for indicating final placement and size of a high-resolution scan.

**Gamut:** The overall range of colors that can be produced by a particular color model. A color which is outside of a particular color model's gamut can not be produced by that color model. CMYK has a very restricted gamut, meaning that many colors can not be reproduced in CMYK under any circumstances.

**Halftone:** A pattern of dots arranged to simulate shades of gray or levels of color. Printing presses can not reproduce a continuous tone image; instead, the image is simulated by printing dots of various sizes (the darker the tone, the larger the dots).

**Imposition:** The process of rearranging pages into a sequence suitable for running on a printing press. Imposed files are printed as flats, and then folded and cut to create a finished piece with the pages in the correct order.

**Line Screen:** The number of rows of dots in a printed halftone, usually expressed in lines per inch (LPI).

**Live Area:** The area on a page where you can safely place body copy or other important information. Important information should not extend all the way to the edge of a page, because there is a chance that the information may be cut off if the page is not cut precisely when it is printed. The live area ends 3/16 of an inch from the edge of the page.

**Midtone:** The areas of an image which print at close to 50%.

**Preflight:** Checking files before they are processed to help prevent future problems.

**Proof:** A representation of what a page will look like when it is printed on a printing press.

**Resolution:** The level of detail in a raster graphic, measured in dots per inch (DPI). The greater the number of DPI, the smaller each individual dot is, and the greater the detail.

**Rich Black:** A black color that is made by using other colors of ink along with black ink. This produces a much darker, deeper black on press than can be achieved by using black ink alone. The recommended rich black is: 40% Cyan, 30% Magenta, 30% Yellow, 100% Black.

**Specifications Web Offset Publications (aka: SWOP)** A set of specifications and tolerances for publication printing that ensures measurable, consistent reproduction along each step in the printing process.

**Web Press:** A high-speed, high-throughput printing press that prints on a continuous roll of paper. Web presses are usually used for high-volume print runs because of their great speed. Smaller runs are generally printed on presses that print a single sheet of paper at a time.