

# 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 Account Manager.

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*Schumann Printers, Inc.*

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# Supplying PDF 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 is run through preflight to catch potential problems before processing.

To download our recommended PDF presets, go to:  
[www.spiweb.com/prepressGuidelines.html](http://www.spiweb.com/prepressGuidelines.html)

## PDF Guidelines

- **No spot colors.** Convert all spot colors to process CMYK before PDF output. If a spot color is needed for print, please be sure that it is the only spot color in use, and that it is named correctly.
- **Only single page PDFs** will be automatically processed. Multi-page PDFs will fail to process. Therefore, it is recommended that after multi-page PDFs are created in QuarkXPress or InDesign, they be split into single page PDFs before uploading. Adobe Acrobat Pro (7 and above) can extract pages as separate files from a multi-page PDF very quickly. Please let us know if you need any assistance.
- **PDF files must be named correctly.** Because you are sending files directly into an automated workflow, the file names are very important. SPI will not have the ability to rename the files without reprocessing the files. If you need any assistance with file names, please don't hesitate to ask.

Our recommended naming convention is:

Abbreviated title / issue month or season / page number .pdf

Examples: SPI\_APR\_01.pdf

SPI\_SPRING\_01.pdf

- **Revised files** must be named exactly the same as the first files were. They will then over-write the first file, ensuring that only one file is available when going to press.

## Sending Test PDF Files

We recommend that test PDF files be submitted whenever appropriate. They'll be thoroughly inspected for potential problems. Please contact your Customer Account Manager before uploading.

# Supplying 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. We strongly encourage the use of desktop publishing software and do not support programs such as MS Word and Excel.

## Images

- Color and grayscale images should have a final resolution of twice the line screen.  
Example: 175 line screen = 350 dpi
- Be careful if enlarging images in InDesign or QuarkXPress. Remember that as the image is enlarged the image quality is lowered.

## Layout

- Use one document whenever possible. There is less potential for page set-up errors, and PDF output will be faster.
- Include supporting files (fonts and images) with any QuarkXPress or InDesign files.
- Send only the files needed for output. InDesign's "Package" feature, and QuarkXPress's "Collect for Output", are a good way to ensure that only the necessary files are included.
- A minimum line thickness of .25 points is recommended for best results.
- All critical copy must be at least 3/16" from the final trim to avoid the possibility of being trimmed off.
- Allow 1/8" of bleed beyond the trim size of the page. Failure to do so may result in white showing on trimmed edges.

## Color

- Use only CMYK process colors for any four color project. If your project is using a 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".
- NEVER use the color [Registration].
- For black body text, use the color [Black]. Don't use a multi-color black.
- Avoid small or delicate type whenever using light type on a dark background.

# 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 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, start with 5500 and adjust as needed based on the brightness of your paper. If you need assistance, or better color accuracy, contact your CAM for more information. The next step is the color management setting in the applications that you’ll be using. Our recommended settings can be found at:

[www.spiweb.com/prepressGuidelines.html](http://www.spiweb.com/prepressGuidelines.html)

We 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 you were aiming for.

## 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.

Schumann Printers, Inc. can provide you with a SWOP certified color X-Matchprint Digital Proof or a SWOP calibrated ink jet proof (Epson 4900 with GMG software).

## Online Proofing

Schumann Printers, Inc. provides an online proof for every page. Perfect for those tight deadlines, online proofs can be viewed just moments after your PDFs have been uploaded.

# Supplying Proofs

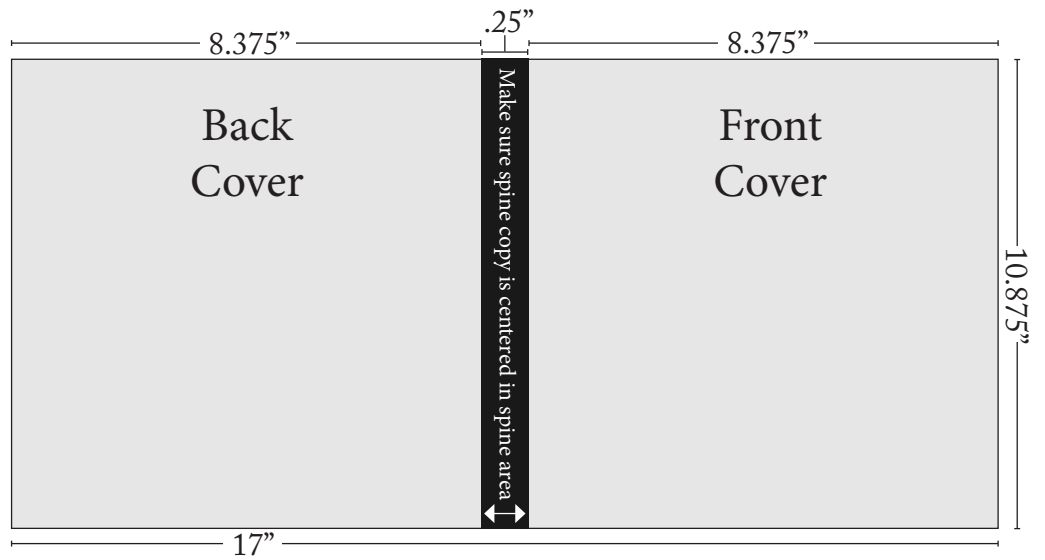
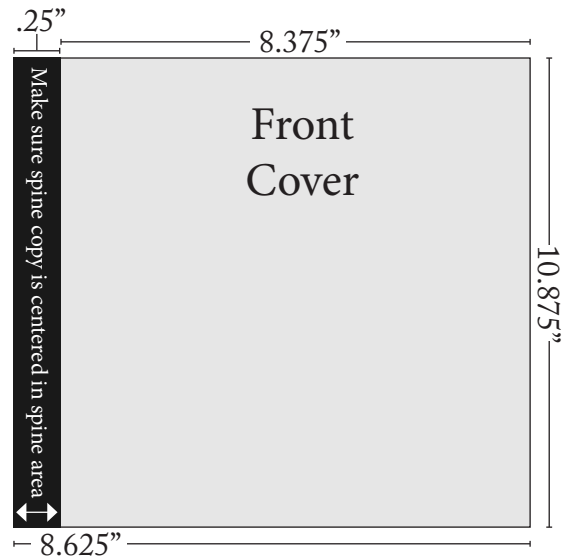
Because of the variety and availability of color proofers and printers on the market, supplied color proofs must meet certain standards of color reproduction. The type of proof you supply may vary in cost and quality, usually according to its level of integrity in simulating the appearance of the anticipated 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 4900), 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, a hard proof, or 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 300-600 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:

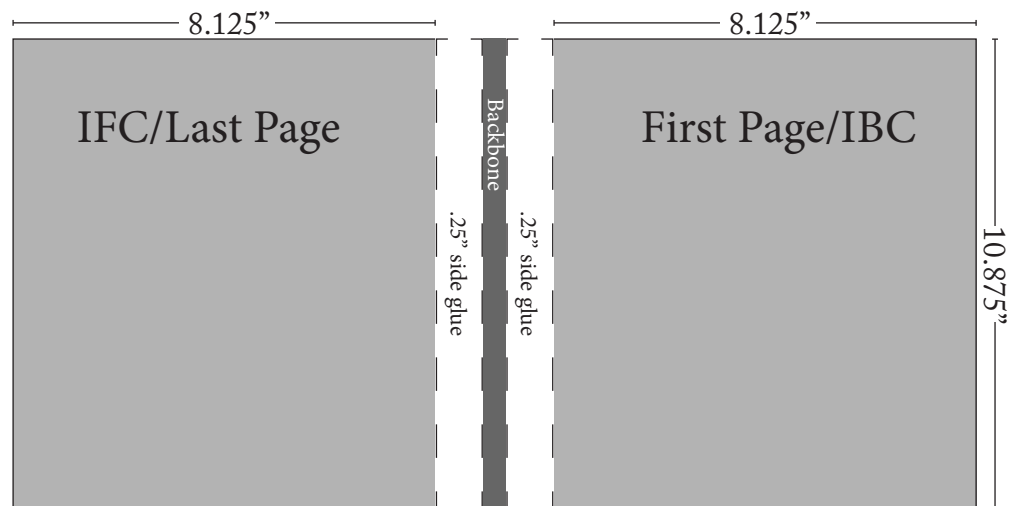
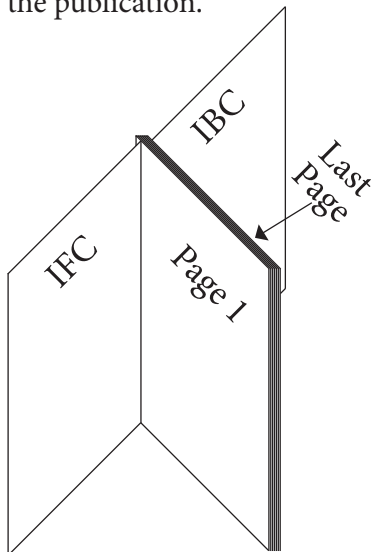
[www.idealliance.org/specifications/swop/specifications](http://www.idealliance.org/specifications/swop/specifications)

# Perfect Bound Covers

When setting the page sizes of the outside covers, the spine must be included with the front cover. If you'd like, you may also include the back cover, as shown in the middle example. Both examples show a standard magazine size. Your Schumann Printers CSR will provide you with a custom spine size for your publication.



On a perfect bound publication, the side glue reduces the live area of the affected pages by a quarter of an inch. To account for this, the width of these pages should be a quarter of an inch smaller than the final trim size of the publication.



\* Please provide bleed on all four sides of each page.

# Prepress Glossary

**Bleed:** Object 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 trimmed, small variations in the trim will not result in white showing at the edge of the page.

**Dot Gain:** The darkening of an image when it is printed on a press due to the ink spreading out on the paper.

**Final resolution:** The resolution AFTER any scaling has been applied in QuarkXPress or InDesign.

**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 arranging 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. The recommended live area is 3/16 of an inch from the edge of the page.

**Midtone:** The areas of an image that are close to 50% ink density.

**Preflight:** Checking files before they are processed to help prevent printing 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 that is made by using other colors of ink along with black ink. This produces a much darker and deeper black on press than can be achieved using black ink alone. Our 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 and 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.

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



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