# PREPRESS GUIDE

This guide is for our customers and their prepress suppliers. If you require further assistance, please contact your Schumann Printers, Inc. Customer Account Manager.

- Making PDFs
- Native Files
- Proofing
- Color Management
- Perfect Bound Covers
- Glossary

## Schumann Printers, Inc.

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# Making PDFs

Schumann Printers, Inc. (SPI) will do everything possible to ensure that the PDFs you provide print exactly as desired.  Every PDF submitted to SPI is run through preflight to catch and/or fix potential problems.  Before making PDFs, please put our recommended color settings in place.  You can find them, along with our recommended PDF presets, here:

**www.spiweb.com/specifications**

## PDF Guidelines

- **Convert all spot colors to process CMYK before making PDFs.**  If a spot color is needed for print, make sure it's the only spot color in use and that it's named correctly.  Make sure your Customer Account Manager (CAM) is aware of it before uploading PDFs.

- **Only single page PDFs** will be automatically processed.  Multi-page PDFs will fail to process.  Multi-page PDFs can be separated into single page PDFs before uploading with Adobe Acrobat Pro.  Contact us if you need any assistance.

- **PDFs must be named correctly before uploading.**  We can not rename PDFs without re-processing them.  If you need assistance with names, please don't hesitate to ask.  Our recommended naming convention is:

    (Abbreviated title - issue month or season - page number)
    For example: SPI_Oct_01.pdf or SPI_Fall_01.pdf

- **Name revised PDFs the same as the original PDFs.**  (.p1 is added after processing)  They will over-write, ensuring that only the latest PDFs are available when we print.

- **All critical copy should be at least 3/16" from the final trim** to avoid the possibility of being trimmed off.  This is considered the live/safe area.

- **Allow 1/8" of bleed** beyond the trim at the top, bottom, and face of each page. Failure to do so may result in white showing at the trimmed edges.

- **Rich black should be used** to avoid a "washed out" or "faded" appearance whenever large text, graphics, boxes, or backgrounds are to print as black.  Use a mix of cyan, magenta, and yellow, along with the black.  We recommend:

    40% Cyan • 30% Magenta • 30% Yellow • 100% black

- **NEVER use the color [Registration].** It is for registration marks only.

## Send Test PDFs

We recommend uploading test PDFs, when appropriate, to be inspected for potential problems.  Please contact your CAM before uploading.

# Native Files

Following the SPI guidelines will virtually eliminate the problems that cause delays and extra costs.  Any non-PDFs are considered native files.  We strongly encourage using InDesign or QuarkXPress for your print projects.

## Images

- Ideally, color and gray-scale images should have a final resolution of twice the line screen. For example: 175 line screen = 350 dpi. Our preflight will flag any images under 160 dpi. If needed, reducing the size of images will increase the resolution.
- Be careful if enlarging images, because enlarging images reduces quality.

## Graphics

- A minimum line thickness of .25 points is recommended for best results.

## Layout

- Use one document for all pages if possible.  PDF output will be faster, and formatting changes will be easier to implement.
- All critical copy should be at lest 3/16" from the final trim to avoid the possibility of being trimmed off.  If the project will be perfect bound, keep in mind that anything near the binding edge will be difficult for the reader to see.
- Allow 1/8" of bleed beyond the trim at the top, bottom, and face of each page.  Failure to do so may result in white showing on trimmed edges.

## Color

- Use only CMYK process colors unless your project will print with a spot color.  If printing with a spot color, let your CAM know exactly which spot color you want so the ink can be ordered well in advance.  Be sure that any usage of that color in an illustration program references the color with the exact same name.
  For example: Pantone 871 C is not the same color as Pantone 871 U.
- Rich black should be used to avoid a "washed out" appearance whenever large text, graphics, boxes or backgrounds are to print as black.  Instead of using 100% black for those objects, we recommend:

<div align="center">

40% Cyan • 30% Magenta • 30% Yellow • 100% black

</div>

- NEVER use the color [Registration]. It is for registration marks only.
- For black body text, use the color [black]. Don't use a multi-color black.
- Avoid using light colored small or delicate type on a dark background.

# Proofing

## Soft Proofs

Schumann Printers provides on-line (soft) proofs for every page. Perfect for those always tight deadlines, soft proofs can be reviewed as soon as your PDFs have been uploaded and processed.

## Hard Proofs

If you'd like to see paper (hard) proofs, your options are below. All of the proofs Schumann Printers offers are accurate for content.

**Content Proofs** (single page)   Printed on a quality gloss sheet. Decent color accuracy.

**Epson Proofs** (single page)   Printed on a thick, premium, semi-matte sheet. Great color accuracy.

**Mock-up Proof** (all pages)   Printed on standard 11 x 17 copy paper.
Spreads are folded in half to form a book.
Reduced to fit as needed. Decent color accuracy.

## 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 final printed piece. For example, some proofers can simulate the final press-work color, while other proofers are only adequate for content integrity and not a great color match.

When viewing color on screen, a hard proof, or the printed piece, keep in mind that displays and printing devices produce color by entirely different means and have different color range capabilities. Displays use RGB (red, green, and blue) light. Printing devices use CMYK (cyan, magenta, yellow, and black) ink or toner. The color space, or gamut, is different for each method. Please keep in mind that most hard proofs are printed at 300-600 dpi of resolution, while press plates are imaged at 2400 dpi of resolution.

If you will be supplying proofs, they must be made from the same PDFs that are provided to us, they must show a control bar with a minimum of one gray swatch, and they must be calibrated to SWOP standards. Those standards can be found here:

**idealliance.org/specifications**

# Color Management

Color management is the controlled conversion between the color representations of various devices. Those devices; cameras, monitors, and presses, just to name a few, all have different ways of showing color. Color management allows us to see what the printed piece will look like, right from the beginning. If you'd like to see color more accurately, start by calibrating your monitor. You can search your System Preferences, or Control Panels, for "calibrate display" and then follow the on screen guides. If you can choose the white point, start with 5500 and adjust as needed based on the tint of your paper. If you need assistance, or better color accuracy, contact your CAM for more information. The next step is the color settings in the applications that you'll be using. Our recommended settings can be found on our website:

**www.spiweb.com/specifications**

The last step is handing the color management off to us. Schumann Printers utilizes state of the art offset presses and prepress solutions to produce the finest printing quality. Schumann Printers uses SWOP and GRACoL specifications. More information can be found here:
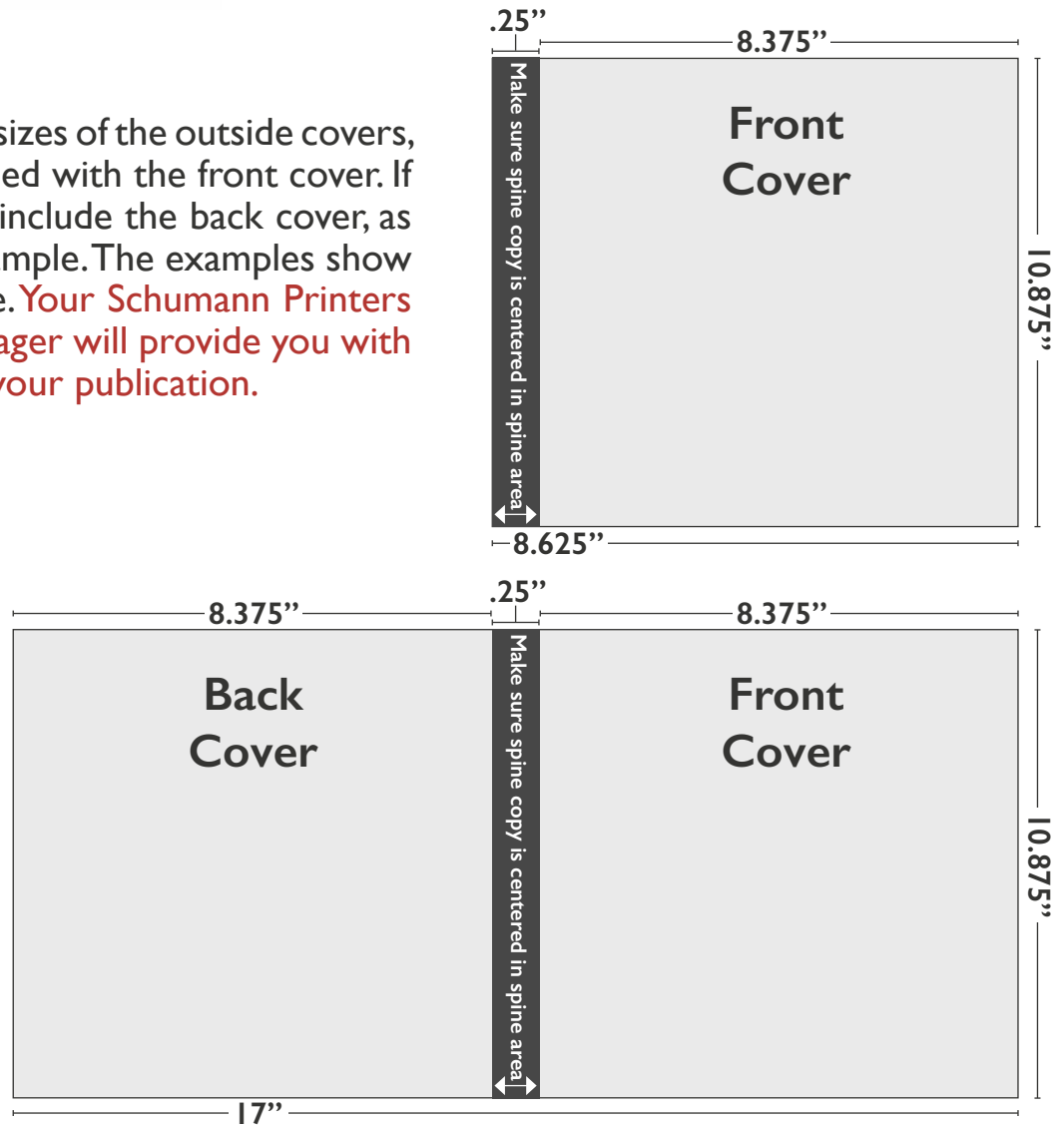
**idealliance.org/specifications**

These parameters have proven to produce excellent quality. Deviation from these specifications is highly discouraged.
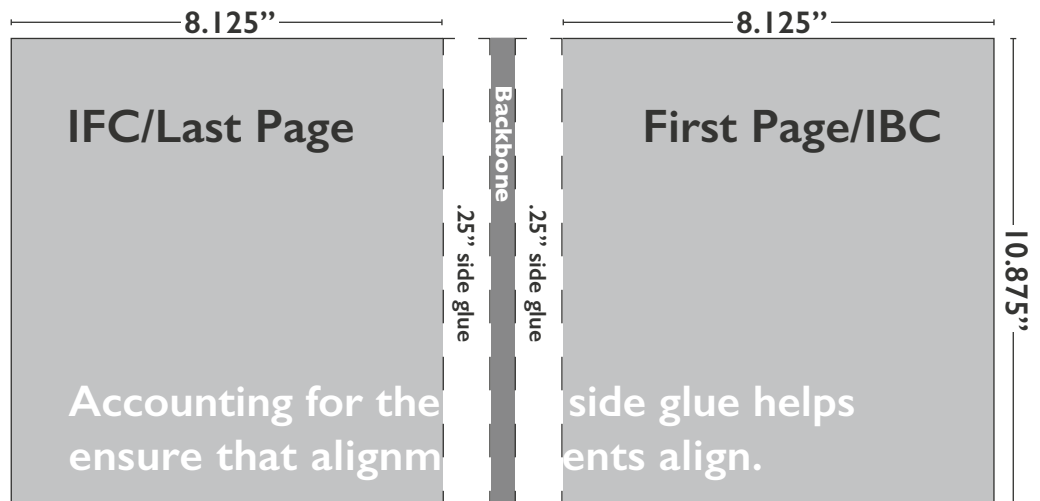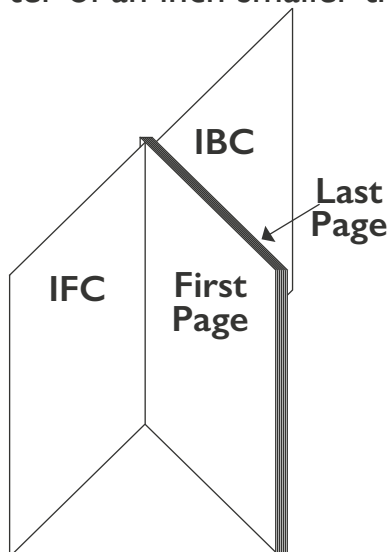
## Color Gamut

Human Eye

RGB

CMYK
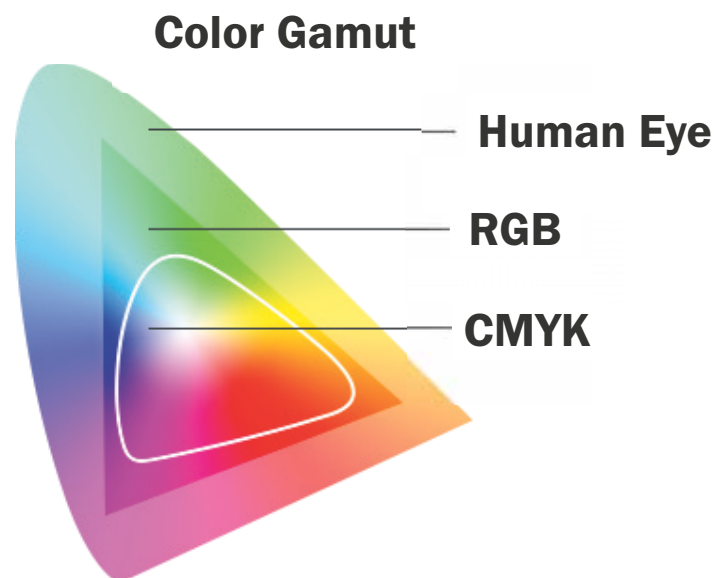
# Perfect Bound Covers

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. The examples show a standard magazine size. Your Schumann Printers Customer Account Manager will provide you with a custom spine size for your publication.

.25"

8.375"

Front Cover

10.875"

Make sure spine copy is centered in spine area

8.625"

8.375"

.25"

8.375"

Back Cover

Front Cover

Make sure spine copy is centered in spine area

10.875"

17"

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.

IBC

Last Page

IFC

First Page

8.125"

8.125"

IFC/Last Page

First Page/IBC

Backbone

.25" side glue

.25" side glue

10.875"

Accounting for the side glue helps ensure that alignments align.

Please provide bleed on all four sides of each page.

# Glossary

**Bleed:** Objects that extend beyond the edge of the page.  Any object that goes to the edge of a page should extend 1/8" beyond the edge, so that 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.

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

**Gamut:** The range of colors that can be produced by a particular color model.  A color outside of a particular color model's gamut can not be produced by that color model.  CMYK has a very restricted gamut, meaning 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, expressed in lines per inch (LPI).

**Live/Safe 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/safe area is 3/16" from the edge of the page.

**Mid-tone:** 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.

We recommend: 40% Cyan • 30% Magenta • 30% Yellow • 100% black

**Web press:** High-speed, high-throughput printing on a continuous roll of paper.  Web presses are usually used for high-volume print runs because of their great speed.