

ZENITH SPECIALTY BAG CO., INC.

MANUFACTURERS OF SPECIALTY BAGS AND PAPER PRODUCTS FOR THE FAST FOOD AND BAKERY INDUSTRIES

Artwork Requirements

Design and Prepress Guidelines for Flexographic Printing

Limitations of the Flexographic Print Process

Flexographic printing is both efficient and economical. However, it demands attention to certain issues that can be overlooked when using other printing methods. This guide provides some basic rules to follow when preparing artwork to be printed using the flexographic print process.

Due primarily to the nature of the raised image plate technology, flexography has some limitations concerning screen tint values, registration tolerances and certain other print aspects. Following these simple guidelines can dramatically improve the quality of your job. It will also help us work together to ensure the highest level of customer satisfaction.

Notes to the Graphic Designer

Virtually all graphic design software is designed around standards and tolerances for offset lithography. Tolerances in offset lithography are generally much tighter and may therefore allow for a greater degree of artistic freedom than is available in the flexographic print process.

Production Art Considerations

Font Choice: On small type sizes (up to 8 pt), please consider the use of bold, san serif fonts. Make sure "TM" and "®" marks are large and bold enough to reproduce in a readable manner. Avoid using small reverse (white) text over process or multi-color backgrounds.

Colors: All colors should be properly defined as either process (CMYK) or spot colors. Unused colors should be deleted from the color palette. If using PMS colors, please use the standard color definition as provided in your design application. Avoid using Pantone coated colors on jobs which will print on uncoated paper, and vice-versa.

Trapping: Please leave all trapping to be done by our technicians. Flexographic printing requires different trap specifications than typical commercial printing.

Bleeds & Safety Zones: Maintain 1/8" margins from dieline to text and logos, except for intentional bleeds. Extend bleeds 1/8" beyond the die line.

Line Widths: All solid lines should be .75 point minimum, while all reverse (white) lines should be 1 point minimum.

Screen Tints: See the detailed print specifications on the following page for recommended tint ranges. Be careful with gradient screens. Gradient screens or continuous tone images that fade to 0% - in any color - will likely show a hard line where the dots end. Drop shadows are the most common example of this.

Governmental Regulations: Zenith is not responsible for regulatory compliance of nutrition facts charts, ingredients lists, allergen statements, or any other regulated copy.

Bar Codes: Zenith offers complete bar code generation services. We will recreate all bar codes with the proper bar width reduction required for our press equipment at no additional charge.

Proofing: We offer 4 levels of proofing for your convenience:

- · PDF- Electronic proofs for content and color breaks
- · Content- Hard copy proofs for content and color breaks
- · Color- Hard copy color matchable proofs for process color
- Tear Sheet- Press proof prepared on job stock utilizing actual plates, ink and press equipment used to print your job. *An additional fee may be charged for tear sheet proofs.*

File Requirements

Software: We support the Adobe Creative Suite software package, up to and including version 5.5. If you use other graphics programs to prepare your files, please export your files into PDF/X-4:2008 format if possible. Please consult your software's documentation for specific instructions.

Not a design expert? That's OK, we can take your existing logo or "napkin sketches" and, for a modest fee, create professional design files. Please consult with your sales representative for more details and a quote.

Media: We accept CDs or DVDs (single or dual layer). Sorry, we no longer accept floppy disks, JAZ, SyQuest, or any other media types. We also offer a secure web-based drop box for your files, and you can always email smaller files to us at art.dept@zenithbag.com. (No files over 5MB via email, please!). We support Stuffit and ZIP compression.

Fonts: We support OpenType, TrueType and Type 1 fonts. Please include all fonts used in your layout or convert all your text to outlines. Please note, we can't perform text corrections on outlined text. If using Type 1 fonts, please include both screen and printer fonts.

Graphics/Linked Files: We support any file type that you can place in your graphic application. Please refrain from embedding graphics in your Illustrator documents - keeping the files as links allows us to more easily inspect the files and make any needed corrections.

Templates: Templates for all of our standard and custom products are available upon request. We will gladly provide them in Illustrator, Illustrator Template, or PDF formats. We recommend utilizing our templates to avoid costly reworks. Just let us know which format you prefer.



Print Specifications & Tolerances

Design and Prepress Guidelines for Flexographic Printing

Due to our extensive product line, Zenith offers a wide range of flexographic print specifications. For your convenience, we have classified our capabilities into 4 distinct print levels:

Level A: Our highest quality print level for square bottom bags for coffee, cookies, mixes, pet treats, etc.

- · Up to 8 colors including varnish
- · Up to 150 lpi screen ruling on coated papers
- · Screen tint range from 5% to 90%
- · Registration accuracy ±.015"
- Minimum line width: Positive: .5 point

Reverse: .75 point

• Minimum font size: Positive: sans serif 4 pt; serif 5 pt Reverse: sans serif 5 pt; serif 6 pt Reverse text may be stroked to help compensate for fill-in during printing.

Please allow for a trap width of 1 point.

• QR Code Minimum width and height .75 Must print in Black

Level B: Our mid-range print level for larger square bottom bags and high end bread bags.

- Up to 6 colors including varnish
- · Up to 85 lpi screen ruling
- Screen tint range from 15% to 85%
- · Registration accuracy ±.03"
- Minimum line width: Positive: .75 point
 - Reverse: 1 point
- Minimum font size: Positive: sans serif 5 pt; serif 6 pt Reverse: sans serif 6 pt; serif 8 pt Reverse text may be stroked to help compensate for fill-in during printing.

Please allow for a trap width of 2 points.

• QR Code Minimum width and height 1" Must print in Black **Level C:** Our standard print level for pinch bottom bread and portion bags.

- · Up to 4 colors
- · Up to 65 lpi screen ruling
- \cdot Screen tint range from 15% to 80%
- · Registration accuracy ±.06"
- · Minimum line width:

Positive: .75 point Reverse: 1 point

· Minimum font size:

Positive: sans serif 5 pt; serif 6 pt Reverse: sans serif 6 pt; serif 8 pt Reverse text may be stroked to help compensate for fill-in during printing.

- Please allow for a trap width of 2 points.
- QR Code Minimum width and height 1" Must print in Black

Level D: Our standard print level for sandwich wrap sheets and basket or tray liners.

- \cdot Up to 4 colors
- · Up to 65 lpi screen ruling
- · Screen tint range from 20% to 80%
- · Registration accuracy ±.06"
- Minimum line width:

Positive: .75 point

- Reverse: 1 point
- Minimum font size:

Positive: sans serif 5 pt; serif 6 pt Reverse: sans serif 6 pt; serif 8 pt Reverse text may be stroked to help compensate for fill-in during printing.

Please allow for a trap width of 2 points.

· QR Code Minimum width and height 1" Must print in Black