

Glenroy Flexographic Print Guidelines

Glenroy, Inc. uses ten-color, wide-web, flexographic printing for its packaging. These guidelines were created to help our customers and their designers produce art that is "flexo friendly". If there are any questions, please contact Glenroy Graphics Engineering at 800-824-1482.

Suggestions for cost savings

Glenroy would be glad to review preliminary art and offer feedback on potential print issues. This will be the most effective if you have an accurate die line and web layout. We can then calculate what our print cut off will be based on our existing tooling. If you need help getting a die line drawing into a usable file for placing art into, we can help facilitate that.

If you have a family of packages it is best to have us working on all of them together. Our prepress/plate supplier can achieve some efficiencies when working with a group of related designs. It is also possible for you to design a group of jobs to utilize some common plates between them. These files should be submitted at the same time and the common elements designated.

Avoid multiple changes which cost time and money. Please review your files closely, making sure all parties have approved prior to having us start work on them. Changes and additional proofing will incur more costs.

Send two versions of the artwork. One with the text converted to outlines and one with live text and the needed fonts. If there are changes needed that require editing or repositioning the text, it will be faster and easier to use the live text.

Type and line size *

Minimum type size (in comparison to Helvetica typeface)

Direct print (positive): 4 pt. Regular - line thickness .005 inch [.127mm]
(minimize horizontal scaling & condensed type)

Indirect print (reverse): 6 pt. Bold - line thickness .012 inch [.3048mm]
(no condensed or horizontally scaled type)

Minimum line size

Direct print: .005 inch [.127mm] (.3603 pt.)

Indirect print: with machine direction: .0139 inch [.353mm] (1 pt.)
against machine direction: .01695 inch [.4305mm] (1.25 pt.)

Type is best created in vector format and printing in a single color. Black type should print with 100% Black.

Avoid creating indirect type or lines from multiple colors. If this is unavoidable, then outline the type or line with a minimum .0139 inch [.353mm] (1 pt.) dark outline (black). This will help define the character edges, but it won't hide registration shift completely.

Drop Shadows - A minimum of .01695 inch [.4305mm] (1.25 pt.) is recommended for drop shadows. If any thinner, then the probability of mis-registration will increase.

Indirect or small sized type: a non-condensed, sans-serif typeface is recommended. Serif, compressed, condensed, or horizontally scaled typefaces may necessitate the need for larger size type. Positive type can over-print process areas if there is sufficient contrast (ex. black, dark blue, dark green).

Trap size *

Color to color trap sizes: .010 inch - .0156 inch [.254mm- .396mm]

Minimum holding line: .0139 inch [.353mm] (1 pt.)

(When using the minimum trap size or holding line of 1pt., the chance of mis-registration is greater.)

Vignette Range

1%-95% (1% will gain up to 10% when printed; carry a 1% minimum dot to avoid hard breakoffs)

What is created on the computer with a two-color vignette, one color fading into another, may be best reproduced in print with a vignette screen of one color over a solid of the other. Running a minimum dot of the vignette color and not letting it break off, will yield the smoothest looking blend.

Screening

133-150 lines per inch (133 lpi is standard)

*** On printed webs 37.0" and larger - minimum line and trap sizes may need to increase to avoid noticeable misregistration. A center micro-dot will be added to the plates to help with plate mounting accuracy. [indirect (reverse) lines 1.5pt., direct (positive) holding lines 1.5 pt., traps would be full size at .0156"]**

Color Matching

Spot Color: Glenroy uses the Pantone Digital Library to produce ink drawdowns that will be customer approved and used as a guide for printing. Spot colors are suggested when the consistency of a specific element is important through an entire product line, and where vibrant color is needed. Converting a custom color to CMYK may result in a less than optimal color.

Process Color: Glenroy will use a customer signed off contract proof as a guide for printing.

Please take into account the substrate tint and its effect on ink color matching.

Printed Codes

Recommended minimum UPC print size: 90% size, if non-truncated, 100% size, if truncated.

Absolute minimum UPC size is 80%, but is not recommended. The smallest truncation size is .625 inch [15.875mm] top to bottom on 100% size UPC.

Quiet Zone: A no-print area preceding the first bar or after the last bar. Minimum sizes are dependent on the symbol specified. A generally good amount is .125 in. [3.175mm].

Position: In order to minimize bar code scanning problems, position the bars running with the direction of the printed web, not perpendicular to it.

Color: Print in darkest color over a white background for maximum contrast (avoid red colors). Other codes printed: GS1 Data Bar, Code 128, Code 39, Interleaved 2 of 5, Data Matrix, QR - please call to discuss.

Bar Width Reduction: Our BWR is .004" for bar codes and .002" for data matrix codes (unless they are too small). Please let us know if the code placed in the art has BWR applied.

Metallic or Pearlescent Inks

These inks have powder additives that need to be suspended in the ink. They do not print detail well, so we do not print screens or fine, detailed print (small lines or type), with these inks. They have a tendency to print with a rough edge on images. The additives can make the ink bond weaker, so we want to keep these types of inks out of the seal areas of the package.

White Ink

The white ink has titanium dioxide in it and is thicker. We do not suggest printing screens, fine type, or small details with white ink. Type printed directly with white ink will get bolder in appearance and should be at least 7pt. in size - line thickness .008 in. [.2032mm]. White type should only overprint lighter colors because the white ink is not fully opaque. A better method to achieve white type can be to reverse the type from a solid color and let the white of the substrate show through (indirect print).

Proofs

Line and simple screen art- Adobe PDF or HP inkjet proofs will be produced. Glenroy will need to receive a customer signed off proof before printing. These proofs are meant for viewing copy, color breaks, sizing, and positioning. They are not accurate for color.

Process art and vignetted spot colors- digital contract inkjet proofs approximating our press gain in screened areas will be produced. These proofs cannot show press gain in type, line, or reversed areas. They are not an exact representation of final color but will be used as a guide along with the approved ink samples. Glenroy will need to receive a customer approved contract proof before printing.

Please be aware that proofing systems reproduce artwork in a different manner than flexographic printing and therefore will not be an absolute match with the printed product.

Plate Break

Manufactured plate break- When flat flexographic plates are wrapped around the print cylinder, there is a naturally occurring plate break where the two ends join together. On a full bleed image, the minimum manufactured plate break is .0625 inch [1.587mm]. If needed, a cover plate can be printed over the plate break. This cover plate will have to run on a separate print station and will trap with the background color.

Seamless plates- If there needs to be no plate break appearing on the print web, Glenroy can use a specially prepared seamless print sleeve. This type of sleeve does add to the time and cost of the plates and does not have the same specification parameters as a flat plate. In some instances, graphic elements may limit the use of a seamless sleeve.

Electronic Art

Supported Software: Adobe Illustrator, Adobe Photoshop, Adobe InDesign

Vector art in Adobe Illustrator is preferred. If sending a PDF, the preferred type is Press Quality PDF 1.5 w/ Layers and "Preserve Illustrator Editing Capabilities" checked during the creation of the PDF. If a PDF/X is required due to any other agreements in place the PDF/X-4:2010 with layers is preferred.

Supported Platforms: Macintosh is the standard platform, but Windows files will be accepted. Fonts: Please convert type to outlines (paths), and/or include the original fonts.

Need to include these:

- PDF along with native application file.
- All supporting files need to be included. Please link Photoshop files in Illustrator and provide all supporting files separately. (Resolution must be a minimum of 300 dpi at 100% size.)

File Transfer Options

E-mailed attachments (GraphicsMail@glenroy.com) - We recommend compressing the files prior to sending and including an Adobe Acrobat PDF for reference. There is a 10 MB size limit for our email system.

Use a file transfer website such as WeTransfer, ShareFile, Hightail, or Dropbox. We can retrieve art posted to an FTP site. Please e-mail appropriate information (address, user name, password) and include a PDF file.

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