

Before you design your project, it is important to know how your design will be printed. It is important to plan your project so it can be printed efficiently and timely. Proper file preparation is key to achieving the best and desired results for your project. Our prepress department will review every file that you submit. Through many years of experience we have created some file preparation tips to help make your project go smoothly. Please take some time to go over the tips and suggestions.

Indicate what program, platform and version you used to create your files. This is important to us. By doing so we can determine what computer to load your files on and helps ensure that your project will reproduce as you intended it to.

Preferred Programs

For the best results, we recommend using the following programs:

- Adobe Acrobat (PDF)
- Adobe Illustrator (For Vector Graphics)
- Adobe InDesign (For Page Layout)
- Adobe Photoshop (For Photos)
- QuarkXPress (For Page Layout)

Although we have the following programs, if possible do not use Microsoft Word or Microsoft Publisher when creating files, they can be problematic, because Microsoft does not support color and commercial printing reliably. Using these programs can result in an undesirable finished project.

Working with Linked Graphics

For the best results, we recommend the following file types:

Adobe Illustrator Files

- AI and EPS files
- Do not use Illustrator for multi-page files, it is not as efficient as a page layout program and it takes longer for us to process.

Adobe Photoshop files

- TIFF and EPS files. (Do not use GIF, PICT or JPEG formats, these may produce undesired results, resave these file formats to either TIFF or EPS prior to linking in your layout program.)
- When saving EPS file, select the "preview" as "Macintosh 8-bit", not JPEG.
- The standard resolution for photo files is 300 dpi (at final size in the layout) for continuous tone images, and 1200 to 2400 dpi for bitmap/vector line art.
- When clipping paths are needed, they must be recreated in Photoshop and saved as a TIFF or EPS file.

Applicable to all Linked Graphics

- Do not embed images. Allows link your graphics to your page layout program file.
- File should be included in their original editable format. This will allow us to edit/create traps and make any necessary changes without having to wait for new files. Ensure that all linked graphics are updated and have the same file name that is used in your page layout program.
- Delete all extra channels, paths, colors and layers that are not being used in files.

Understanding Resolution and File Type

Vector Graphics

Vector files (Illustrator) use mathematics to describe and determine the shapes that create your image. As a result these images are resolution independent. As the image is enlarged or reduced in your page layout program the resolution is determined by the output device.

Bitmap Graphics

Bitmap files (Photoshop) use a series or grid of pixels to form the color and create your image. Pixel images have a fixed resolution, so the image is resolution dependent. As the image is enlarged or reduced in your page layout program the resolution changes with its sizing. As you enlarge the image size the resolution decreases and as you reduce the image size the resolution increases. The below chart shows several examples of sizing and the resulting effect on the resolution. As a rule of thumb your image resolution at final size in your page layout program should be 300 dpi.

| Original dpi | Image scaling in page layout | Resulting final resolution of image |
|--------------|------------------------------|---|
| 300 dpi | 25% | 1200 dpi (increases resolution 400%) |
| 300 dpi | 50% | 600 dpi (increases resolution 200%) |
| 300 dpi | 100% | 300 dpi (resolution remain the same 100%) |
| 300 dpi | 125% | 240 dpi (decreases resolution 80%) |
| 300 dpi | 150% | 201 dpi (decreases resolution 67%) |
| 300 dpi | 200% | 150 dpi (decrease resolution 50%) |

Setting Up Your Document

Page Size

- Create your file to the exact document trim size.

Bleed

- Bleed occurs when an element of your design extends beyond the trim edge. If there are bleeds, allow 1/8 inch on any/all sides that require bleed. Doing this eliminated the chance of white space occurring between the design element and the edge of the paper during the trimming process.

Page Order

- Create your file in single page or reader's spreads. It is easier and less time consuming to build the imposition from reader's order than printer's spreads.

Live Area

- With the exception of items that you intend to bleed, it is recommended that the "live area" is at least 3/16" from the trim edge. This will help ensure that no critical copy or images are cut off during the trimming process.

Fonts

Fonts are probably the most important and most overlooked aspect in the design/layout process. It is important to include all fonts that are used in your project. Not only those used in your page layout program, but also those that are used in linked graphics files. These fonts if different from those used in a page layout program, will not be included when you “package” or “collect for output”.

- Use Type 1 fonts whenever possible. TrueType and Multiple Master fonts can cause issues during the prepress process.
- Provide both your screen and printer fonts.
- Avoid the use of the style menu to set fonts within a document. For example, use “Helvetica Bold” instead of using “Helvetica” then applying a “bold” attribute to it.

Color

- All color should be created in CMYK. If you are using linked graphics be sure to convert any RGB color to CMYK in the applicable program. Converting during the prepress process, “RIPPING”, may result in undesirable or unwanted color.
- When using spot colors, make sure that the naming is the same in any linked graphics. Having multiple name for the same color may result in undesired results
- Convert any spot colors that you want in CMYK prior to submitting your files.

Trapping Requirements

Trapping is the process of compensating for registration on press by printing small areas of overlapping color when objects meet. Most default trapping gives you less than desirable results, unless you are experienced in setting trap, please do not set individual or global trapping. Our prepress specialists will handle all the trapping for your files. If you have specific needs, please notify us when you submit your job.

Proofing

- PDF Proof
The PDF proofs that we send you for proofing are processed through our prepress department and are “ripped”. This ensures that you are reviewing a PDF that is same that is used for plating and printing. Although this is the same file that is used for printing, please remember that the color on your monitor will vary from the color that is printed on press.
- High Resolution Color Proof
Our High Resolution Color Proofs are produced on an Epson Inkjet Printer. We have “fingerprinted” our proofs to our press to ensure color consistency between proof and press.
- Blueline Proof
A Blueline Proof, sometimes called a “booked” proof is a low resolution proof to show you the construction of your project.

Once you receive a proof(s) from us, please review them carefully and clearly mark any and all revisions on them. All High Resolution and Blueline Proof should be signed “APPROVED” once you have review them. All signed proofs must be returned to us prior to plating to ensure that your project is printed correctly.

Changes and Revisions

Once you have received a proof from us and have changes or revisions, please indicate all changes directly on the proof. We can easily make minor changes and save you some money by not having to re-do any work we have already completed on the original supplied file. If you must send us revised files, please change the file name so that we can distinguish between the original and revised files. However, keep the original name of any linked files so that the links remain active.

Final Note

- Be following these guidelines your project will move more smoothly through prepress and result in less time being spent with you to ensure that your printed material is produced with your desired results.
- If you have any questions related to file preparation please contact CMYK Printing.