## Photos & Graphics

Complex Artwork

At times a file is created with an unusual number of points and paths. Every point that is placed increases the size of the file, which may result in an unmanageable file size. To work with this type of file, reduce the number of points in the file. Or save the file as a PDF with everything embedded. Then place the PDF into the pagination program.

Pagination Program. This page was created in Illustrator and placed in a pagination program.
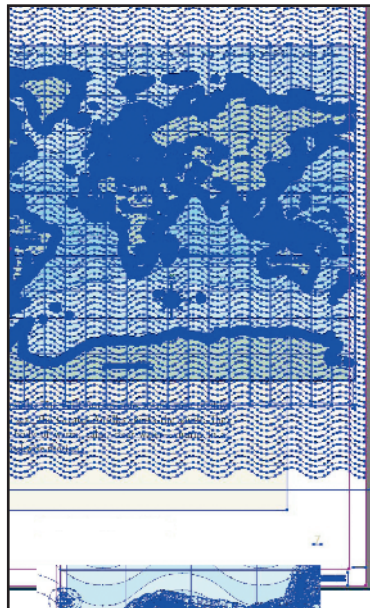
Refined File. The number of point indicators is too great for the processors to handle at one time.

Clipping Paths

The most common use of a clipping path is to drop backgrounds or create a mask of an image. Corporate Graphics recommends creating a path instead of magic wanding a background to delete it. It is also not recommended to click the option "non-white areas" in a pagination program. By selecting this option essential highlights in an image may automatically be deleted. A clipping path, if done correctly, always creates a clean look and ensures that the image is reproduced correctly. To create a clipping path refer to your software manual.

DCS2 Files

Photoshop files with spot artwork need to be saved as DCS2 files in order to maintain the individual Pantone colors. This type of file, when run to laser through a pagination program, will appear low-resolution. When sent to press, a preseparated high-resolution file will be sent, which holds all the information for a quality image. It is important to indicate on the preflight checklist at submission that a DCS2 file was used.

Gradients or Banding

Banding gradients pose a concern for many designers. To ensure a band that will reproduce correctly, we suggest creating it in Photoshop and applying a small noise filter to it. Another option is to create a gradient beginning with a solid color, but instead of ending it with a 0% PMS color or white, end it with 1% of the PMS color. The look is the same and the banding is not as predominant.

Line Art

It is preferred to have line art created in a vector program, such as Illustrator. However, sometimes this is not possible and the image needs to be scanned and saved as a bitmap, TIFF file.

Linked or Embedded

Embedded files have a tendency to have PostScript errors. CG recommends linked rather than embedded files. A linked file can be easily altered if necessary. For example, if an embedded photo needs color correcting, the embedded images will need to be pulled from the document and then placed back in, leaving a margin for error. A linked file will automatically update.

LZW Compression

LZW compression is known to cause images to become corrupt. The image may appear as a solid block or have thin lines running randomly through it. LZW compression is available when saving a TIFF file[1]. By selecting None, you will be avoiding such complications.

Raster

A rastered image is one that is made up of pixels. The pixels give a photo realistic representation of an image. A clean rastered image should never be enlarged more than 150% in order to maintain the integrity of the image. Usually raster information is saved in these formats: TIFF, EPS, PSD, JPEG or PDF.

Registration Color

Do not use the registration color in the color palette. This should only be used for crop and score marks or any reference marks that are to be indicated on all four plates when printing. It is usually used only for items that are off the page and will not appear on the final trimmed piece.

Photos & Graphics cont.

Resolution

Corporate Graphics recommends all 4-color and grayscale images be at 300 dpi or greater, and bitmap or line art images be at 1200 dpi or greater. However, if your image is resized in a pagination program, the resolution will decrease. For example, if an image is at 300 dpi and enlarged to 150% in a pagination program, the resolution will have decreased to 200 dpi, resulting in a lower quality image. Always scan or size images to the correct size.

Vector

Vector files are created in a drawing program such as Illustrator, Freehand or Photoshop [only if saved correctly], or other programs that are based on lines and points. Vector art can be enlarged to any size and maintain its readability. A vector image is usually saved as a PDF or EPS file format. A higher output resolution is required for these images. To do this, go to Document Raster Effects Settings; under Resolution enter 2400 dpi.

Web Images

Refrain from pulling a logo/image off the Internet to use. Most images on the Internet are not only copyrighted, but also 72 dpi, and will look fuzzy and reproduce poorly.
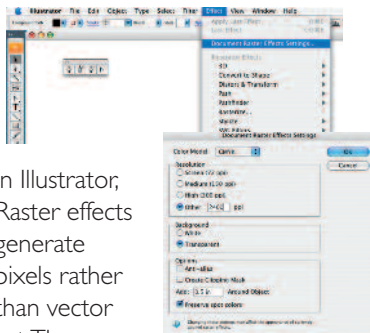
Unused Color

Remove all unused color to reduce file size and confusion at printing. Don't forget to remove the unused colors in Illustrator and Photoshop as well as in the pagination program.

BitmapSettings
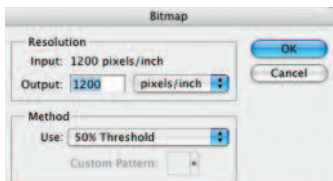
A clean bitmap needs to be converted to 1200 pixels/inch. The best bitmaps are done using the 50% Threshold.

IllustratorSettings

In Illustrator, Raster effects generate pixels rather than vector art. These effects include: SVG filters, effects in the bottom section of the Effect menu and the Drop Shadow, Inner Glow, Outer Glow and Feather commands.

The pixel effects need to be generated at a high resolution. A low resolution may look good on-screen but will lose detail or appear jagged when printed.

To do this, go under the Effects menu and select Document Raster Effect Settings. Select Other, enter 2400 ppi.

EPSSettings
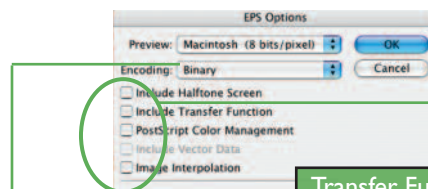
Encoding:
CG prefers the Binary Encoding. This produces a smaller output file and leaves the original data intact.

Transfer Functions/ Halftone Screens:
These should not be selected. When checked they allow the image to override the output device, causing unexpected tonal shifts and incorrect line screens.

All other options should be unchecked.
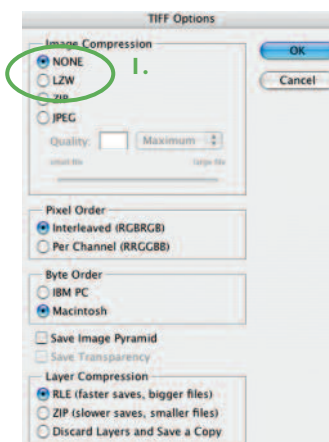
TIFFSettings

Image Compression:
None

Note: with Layer Compression, if your file is already flattened, this option will not be available.