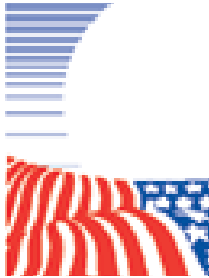




## ALL AMERICAN PRINTING, INC.

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### Bitmap Images and Vector Graphics



*Bitmapped image  
made up of pixels*

Most computer graphic files fall into one of two categories: bitmap images and vector graphics. Bitmap images are composed of pixels, or bits, in a grid, or map. When all of the different pixels are viewed as a whole, the individual pieces give the illusion of an image. Bitmap images are good at reproducing subtle shading found in continuous-tone images, such as photographs. Vector graphics are made up of objects such as circles and squares. These objects are composed of lines and curves that are defined mathematically. Vector graphics are excellent for artwork creation because of their versatility.

Spot printing cannot accept many types of bitmap images. The individual pixels that make up a bitmap image are mixtures of either CMYK or RGB. This makes multi-color jobs using bitmap images impossible to separate into spot colors. Bitmap images that we can accept are crisp black and white images. We can also accept multi-color bitmap images that are printing as a composite, or as just one ink color. In either case, we must emphasize the need to save the bitmap image at a high resolution. We print to film at a resolution of 2400 dpi, but saving the file at 600 dpi would normally suffice. When scanning images, light shades of gray often appear where the image should be white. This is normally due to the image mode in which the image is saved. If the image being scanned is a photograph or contains screens or tints, save the file as a grayscale bitmap image. Otherwise, please save the file as a black and white bitmap image. The file format we would suggest saving your bitmap image is Tagged Image File Format, or a TIFF (.tif).



*Vector based made of  
mathematical points*

Vector graphics are the files we prefer. Programs such as Illustrator, Freehand, and CorelDRAW! create vector-based images that are easily manipulated and editable. When an object needs to appear as a particular color, vector-based programs define that object as that color. Colors used in vector graphics are solid, without variation. This allows the file to be easily separated into its different color plates. And since vector graphics are mathematically based, resolution is never an issue. Objects are defined with coordinates and calculated mathematically, providing smooth curves when printing. We would highly suggest setting up your artwork in vector-based graphic packages.