

## Vector artwork

Vector artwork is made up of mathematical lines and shapes (as opposed to pixels) and will not become blurry when enlarged. This type of artwork is preferred over raster (pixelated) art. The most common vector file types are AI, EPS or PDF.

### Design Specifications

1. Files can be built at either full size or 10% of the actual size.  
*For example, a file for an 8' H x 16' W banner can be built at either 96" H x 192" W or 9.6" H x 19.2" W.*
2. Artwork should be converted into the CMYK color mode.
3. Convert all type to curves/outlines.
4. If color accuracy is critical, it is imperative that a PMS color is assigned.

## Raster artwork

Raster artwork is made up of many "dots." The resolution of the artwork is measured by the number of dots per inch (DPI). The higher the DPI, the clearer the image becomes. This type of artwork has the potential to become blurry when enlarged past the ideal resolution size. The most common raster file types are JPG, TIFF or GIF.

### Design Specifications

1. Files can be built at either full size or 10% of the actual size.  
*For example, a file for an 8' H x 16' W banner can be built at either 96" H x 192" W or 9.6" H x 19.2" W.*
2. Artwork should be converted into the CMYK color mode.
3. If color accuracy is critical, it is imperative that a PMS color is assigned wherever possible.

### Artwork resolution guide

Use the following as a guide for proper resolution when building your files at actual size:

- Images up to 18 sq. ft., use 150 DPI.
- Images between 18 and 30 sq. ft., use 100 DPI.
- Images over 30 sq. ft., use 72 DPI.

Should you design at 10% scale, be sure to increase the resolution accordingly.

*For example, a 36" x 120" image would be 200 megabytes at 100 DPI. A 3.6" x 12" image (10% scale) would require 1000 DPI to create the same 220 megabyte file.*

## When combining both vector & raster art...

When combining both types of artwork, place the raster image in the vector document and save the whole thing in a vector format.

## Vector vs. Raster



Vector Art — PDF, AI or EPS



Raster Art — JPG, TIFF or GIF



Not outlining the text runs the risk that we may not have that same version of the font or may not have that font at all. Outlining text creates tiny anchor points around it converting it into a shape rather than type

## Images from the Web

Images taken from web sites typically **NEVER** work for high end output. Web images are usually an inch or so in size and only 72 DPI. The lowest resolution that can be used for offset printing is 300 DPI.

A good rule of thumb for image size is to avoid artwork that is only a couple kilobytes (i.e. 36 KB). Images that are several megabytes usually are ok to use (i.e. 2.5 MB).