### ARTWORK TIPS TIPS FOR CREATING ART



#### **VECTOR ARTWORK VS. RASTER ARTWORK**

Vector and raster files are the two most common image formats in printing. Though they may look similar, there are important differences between the two.



Vector images use mathematical equations combined with fixed points and curves to create a crisp looking edge. Because there are no individual pixels making up the image, you can scale it infinitely without affecting the image quality. The artwork is editable, scalable, and easy to separate for spot color reproduction if needed. Common vector file formats include: .ai, .pdf\*, and .indd (these formats may also contain raster artwork).



Raster images use a mosaic of pixels stacked next to one another to create an image. This results in artwork that is not editable, scalable, or easy to separate for spot color reproduction. Common raster file formats include: .jpg, .png, .psd, .pdf\*, and .tif.

\*A PDF can contain both vector and raster images depending on the software used to create it.

#### RASTER IMAGE RESOLUTION

The number of pixels in every square inch of a raster image determines its resolution. Printers refer to this as DPI (Dots Per Inch). 300 DPI is the ideal image resolution for printing. A high-resolution image has more pixels in every square inch resulting in a more detailed image when printed.





When you enlarge a raster image, the individual pixels also get larger resulting in less pixels per square inch. This is why it is important to supply a high-resolution image at 100% of the intended print size.

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#### WHITE INK ON CLEAR AND METALLIC MATERIALS

Clear materials often require white ink to maintain color integrity. Without white backing, the imprint will be somewhat transparent, similar to a stained glass window. The following diagrams represent three different options, depending on the art and text elements.

## Flooding the Background White

Applying a white flood coat to the background will cover the entire decal in white and is recommended only for face application decals to create the appearance of a solid white decal.

## Applying a White Halo

Elements with a halo extend white ink slightly beyond the art, creating a 'halo' effect. Choose this technique to increase contrast against dark backgrounds.

#### Backing Up Elements or Text

If the text or elements are thick enough, we can print white ink behind the text or elements only. This process adds opacity to these elements without the white ink being visible.









White viewed from front. White viewed from back.



Full color on silver without white ink



Full color on silver using white ink

When printing art on holographic, silver, or other metallic materials, adding white ink under important elements and text increases opacity, improving the richness of color and blocking the metallic effect from showing through the ink.

#### CMYK VS. RGB

CMYK stands for Cyan, Magenta, Yellow, and Key (Black) and is the color mode that the print industry uses to produce printed imagery. These four colors combined with ink create the right color, shade, and hue on a physical medium.

RGB stands for Red, Blue, and Green and is the color mode that electronic screens use to display digital imagery. A computer monitor or phone screen combine red, blue, and green lights of varying intensities to create the desired color and hue.

When you convert a file from RGB to CMYK, there is generally a shift in color. To avoid unwanted colors in your final printed item, ensure you are creating designs in the CMYK color mode at the start of your project.