



ROSE BRAND DIGITAL PRINTING

- Why use Digital Printing?
 - PRO: Complete design control over content
 - CON: What you see is what you get
 - Bad art = bad print
 - CON: No shortcuts for the designer
 - There is no “interpretation” by a scenic painter
 - PRO: Photographic reproduction possible
 - PRO: Fast turn times possible
 - PRO: Can make multiples of the same image or replace a damaged piece quickly and accurately
 - PRO: Wide range of material choices that are not easy to paint on
 - PRO: No paint deck space necessary
 - Do not need to rent additional paint space and
 - Does not take up floor space in a shop or on stage
 - CON: Limit to seamless size - 10', 16' and 20' x 40'
- Print Technology
 - Print technology is constantly changing and new printers, new inks and new substrates are constantly appearing. Every process has benefits and limitations – match the process to the desired end result and usage.
 - Current digital printing methods
 - Solvent based inkjet – vinyls & coated fabrics
 - Water based inkjet - fabrics
 - UV cured Inkjet – vinyls, fabrics and rigid material
 - Latex based inkjet – vinyls and fabrics
 - Dye Sublimation - fabrics
 - Direct Dye Sublimation - fabrics
 - Water Based Airbrush – Fabrics & RP Screen
- Before you begin:
 - Even if you know what material and process you would like to use, it is worth taking the time to discuss your project – there may be a process or material that is perfect for you that you may not know about.
 - Give us a call and we can help guide you to the best pre-production for your project
 - Artwork creation needs
 - How the print will be used to help guide material selection & resolution needed
 - Costs and lead times to determine feasibility of Digital Printing for your project
 - Plan your lead time – good planning leads to a better final print
 - Artwork creation time
 - Provide a paper match print to send as a reference - include Pantone colors if needed
 - Sample print for approval – not always time or need if match print is available
 - Production & shipping time for final print. Once we have good artwork typical turn times are 7 to 10 business days.
 - Lead times are dependent on many variables such as other jobs already in progress, material or process chosen, slow or busy times of year etc.
 - Raster or Vector artwork
 - Both types of files can work well for digital prints
 - Raster and Vector artwork can be combined by many graphics programs giving the best of both worlds

- Vector files (like clip art) can scale very large with no loss of resolution and DPI is not an issue
 - Logos, and computer graphics are typically created as Vector graphics
 - Adobe Illustrator, CorelDRAW, and Inkscape are typical Vector artwork programs
 - Raster files such as photographs, scanned images or computer generated artwork should be created with the appropriate DPI from the beginning for best results. Resampling of low resolution files is not recommended. Call before you start if you have any questions.
 - Low resolution originals will not scale well
 - Images on websites are typically 72 or 96 DPI at the size on your screen and are often not acceptable for enlargement
 - Typically DPI can be doubled (sometimes tripled) successfully using software - beyond that the image becomes fuzzy and may not produce a quality print
 - Adobe Photoshop, Corel Painter, and Gimp are typical Raster artwork programs
- Artwork setup basics:
 - Final DPI – dependent on viewing distance of the audience
 - 100 DPI at full size – direct viewing at close range (5')
 - Museum exhibit, Corporate office murals
 - 75 DPI at full size – direct viewing at close range as a backdrop
 - Trade show booth, poster, banner, wallpaper, set dressing, costumes, props,
 - 35 DPI at full size – direct or indirect viewing at a distance (20')
 - Theatrical backdrop, film/tv backings, scrim, large events
 - Artwork Scale Factor & DPI
 - Most artwork is produced at a smaller scale than full size
 - Typical scale is 1:12 (1" = 1') or 1:10 (1"=10")
 - Choose **Final DPI** based on viewing distance and multiply it by the **Scale Factor** to get the **Artwork DPI**. for example:
 - Final DPI = 75 and Scale Factor is 12:1 (1" = 1') so **75DPI X 12 = 900 DPI Artwork**
 - Set up file in CMYK mode not RGB
 - RGB works well for images on monitors such as websites and video production but printers are based in CMYK.
 - Converting from RGB to CMYK can alter colors and create undesired results (color shifts)
 - Plan for Bleed
 - Bleed is additional printed area that extends outside the planned visible artwork
 - Bleed should be a continuation of the artwork when possible
 - Bleed can often be created by scaling the image up slightly
 - 3" bleed is preferred. Minimum of 1" bleed on all sides to allow finishing (hems etc.)
 - 3" bleed may be necessary if there is no finishing and artwork wraps a frame
 - Provide a printed reference & plan on a printed proof
 - Different monitors and printers do not reproduce colors consistently so an approved paper color reference is extremely helpful in getting the colors correct in the final print.
 - If artwork is created using Pantone colors (Pantone C or U are most common) please include the Pantone numbers in communication about the project.
 - CMYK printing has a huge range of possible colors but **exact** matching is difficult and sometimes impossible.
 - For extremely large jobs and permanent installations we recommend doing color test prints on fabrics prior to creating artwork when possible for best results.
 - Copyright
 - Little artwork is in the public domain and you must secure permission before using copyrighted material.
 - There are many sites selling stock images online. Before purchasing an image check the resolution of the image to determine if it will enlarge well enough for the project.