

*A leader  
in grand  
format digital  
printing, Grand  
Image prides itself  
on delivering high  
quality indoor and outdoor  
graphics with outstanding  
customer service and cutting-  
edge equipment. Compared to  
large format printing, where  
printers are limited to 100"  
wide, our grand format  
machines stand out with  
widths that reach up to 196".  
The difference opens a world  
of possibilities for large-scale  
projects that look great up  
close and from a distance.*



*leaders in grand format digital printing*

***Information Inside On...***

**File Preparation**

**Color Selection**

**Material Selection**

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**Dye Sublimation**

Please feel free to call or e-mail us with any questions. As always, we are here to serve you.

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## **File Preparation**

*Grand Image offers two major categories of file preparation depending on the dpi of the banner ordered. The following sets of instructions apply to 360dpi banners and 600+dpi banners.*

### **360 dpi Banners**

- Prepare images based on a 1" to 1' ratio. For example, a 10' x 30' image should be prepared as a 10" x 30" design at 600 dpi.
- Scan individual page elements using the same 1" to 1' ratio. Scans may be CMYK or RGB. 600 dpi 1" to 1' or 50dpi 1' to 1'.
- Grayscale images should be converted to CMYK.
- Send files in one of the following formats: Photoshop, Illustrator, QuarkXpress, Page Maker, or InDesign. Other formats may be acceptable, please contact our pre-press department for more information.
- Please include the fonts or outline when possible.
- Define blacks as follows: C: 60 M: 40 Y: 40 K: 100.
- Please send files on CD, DVD, or flash drives. If your file is under 6 megabytes you may e-mail it to [prepress@grandimageinc.com](mailto:prepress@grandimageinc.com). Larger files can be uploaded to the ftp site <ftp.grandimageinc.com>. Please call for user name and password.

### **600+ dpi Banners**

- Prepare images based on a 1" to 1' ratio. For example, a 10' x 30' image should be prepared as a 10" x 30" design at 1200 dpi.
- Scan individual page elements using the same 1" to 1' ratio. Scans may be CMYK or RGB. 1200 dpi 1" to 1' or 100dpi 1' to 1'.
- Grayscale images should be converted to CMYK.
- Send files in one of the following formats: Photoshop, Illustrator, QuarkXpress, Page Maker, or InDesign. Other formats may be acceptable, please contact our pre-press department for more information.
- Please include the fonts or outline when possible.
- Define Blacks as follows: C: 60 M: 40 Y: 40 K: 100
- Please send files on CD, DVD, or flash drives. If your file is under 6 megabytes you can send it to [prepress@grandimageinc.com](mailto:prepress@grandimageinc.com). Larger files can be uploaded to the ftp site <ftp.grandimageinc.com>. Please call for user name and password.

## **Resolution**

While Grand Image offers among the highest resolution (720dpi) in the market for grand format dye sublimation printing, we also offer 360 -1440dpi output for other types of printing. Choice among the four common types - 360dpi, 600dpi, 720dpi, and 1000dpi – should be based primarily on image quality and viewing distance.

Consider image quality prior to upgrading print resolution. Printing the file on high-resolution machines will not help if an image is soft or insufficiently high-res to output at 600 or 1000dpi. Please see file preparation guidelines for proper file resolution.

If image quality meets the requirements, viewing distance should be the second consideration. Generally, the difference between 360dpi and the higher res modes is hardly noticeable at viewing distances beyond 15 feet. Within 5 feet, the differences between 600dpi and 1000dpi can be seen. At this distance 1000dpi will generate smoother flesh tones and provide more detail.

## **Color Selection**

The printers at Grand Image are based on the CMYK color system. If specific PMS colors should be used, the achievable is the CMYK process color version, not the spot color version. We cannot print spot colors directly – if color accuracy is critical, a proof should be ordered. Different proofing methods are available.

A mini proof is a full image reduced to 24” (on the largest dimension). Mini proofs let clients see all the colors of the graphic to make sure the output matches expectations. If your client has concerns about detail, a cross section is encouraged, either in conjunction with the mini proof or as an alternative solution. A cross section is typically a 24” x 24” area of the graphic produced at full size that can answer key questions including, “Is my image sharp enough?” or, “Is the printer resolution good enough, or should I upgrade?” and, “Is the text clear at full size?” or, “How is the material affecting the look of a certain element in my graphic?”

If your client supplies a hard copy proof to match colors, requests a spot color, or submits a color match that is difficult to match, then a swatch proof may be advised. A swatch proof is typically five options, outputted as squares, on one color per square. It allows the customer to see the printer capabilities in the vicinity of the customer-provided color target. The customer can then choose a square to use as the color or ask to make adjustments based on one or two squares.

## **Material Selection**

Material selection can be overwhelming, especially when serving the sophisticated needs of customers and you want to secure the best price in order to win a bid. To help you choose materials for a variety of purposes and indoor and outdoor settings, we offer the following guidelines.

Grand Image vinyls have reinforcement scrim, a material that makes vinyl tear resistant. Our 13 oz. vinyl can be used for a wide variety of applications because the scrim is very strong. Our 15 oz. vinyl, while “heavier,” provides less durability outdoors because the scrim is not as strong, but it allows for an extra smooth printing surface suitable for indoor graphics. The 18 oz. stock is heavy and also has a strong scrim, perfect for double-sided printing for outdoor graphics. Mesh vinyl is used when wind needs to pass through the material and is usually preferred over printing on a vinyl and cutting wind vents.

Fabric graphics range in opacity, stiffness and surface smoothness. Self-adhesive vinyl films vary depending on the surface to be adhered to and can be laminated for incidental abrasions or even foot traffic. Canvas graphics offer artistic outputs and represent a great alternative to vinyl graphics for either indoors or outdoors. While some materials can print double sided, we also can stitch two pieces of almost any material back to back and add a liner for opacity.

## **UV or Solvent Inks**

Grand Image offers the capability to print brilliant graphics utilizing either solvent inks or UV-cured inks. Both options yield two or more years of ink life prior to fading and each comes with distinct advantages. UV inks are inherently matte compared to solvent inks, which are inherently glossy. UV printing can provide consistency in color across a variety of substrates because the ink is immediately cured before being absorbed into the material. Solvent ink outputs can vary tremendously depending on the materials used because different material coatings affect ink absorption in various ways.

UV printing is preferred with double-sided printing and printing on textiles, such as canvas, wallpaper and other materials, to ensure a consistent look or an ultra-matte finish. Solvent printing is advised when images need to project more “pop.”

## **Dye Sublimation**

Dye sublimation printing represents the latest evolution in grand format display graphics. This process allows textiles to be printed with superior color vibrancy without changing the “hand” of the substrate; in other words, the fabric feels the same after printing. Fabric can be washed and reused because the dye is permanent. Grand Image offers 720dpi dye sublimation printing up to 126”wide on most fabrics, a distinction from more limited grand format printers. Because the process involves transferring printed graphics from a special paper to the final fabric, we can transfer onto virtually any polyester fabric. Fabrics range from sheer to blackout, draping to straight hanging, front-lit and backlit, smooth to shiny; and in recognition of modern preferences and needs, they also come in waterproof, eco-friendly and stretchable varieties. Dye sublimation is primarily used for indoor applications because inks can show signs of fading after six months of daily sun exposure. In addition, dye sublimation inks are solvent free and therefore environmentally friendly.