

WINDSOR INDUSTRIES  
**CLEARWATER GRAPHIC WORKS**

CONTRACT SCREEN PRINTERS SHIRTS - TOTES - APPAREL

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Service Provider asi 744800

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NEW PRINTING PROCESS:

**COLORED T-SHIRTS**

*100% cotton standard*

*6.1oz t-shirts only*

FULL COLOR, MULTI-COLOR SPOT,

ONE COLOR SPOT - **ALL SAME PRICE!**

# ART REQUIREMENTS

SAGE #60558

## FOR COLORED SHIRTS PRINTED WITH WHITE BY DIRECT TO GARMENT

Because this t-shirt printing method is a relatively new and still developing technology, there is a general lack of knowledge and some misunderstanding about art requirements. Below is perhaps an unusually detailed and lengthy explanation, but it is worthwhile reading for those who want to get the best printed result with the least amount of time and frustration concerning art issues.

For all our Direct to Garment printing with white ink onto colored shirts, we must use a Photoshop file on a transparent background. That file can contain ONLY the exact image that is to actually be printed on the shirt. For example, for a black shirt, that file cannot contain black elements unless you want black ink to be printed onto the black shirt. Also, the file must contain any white parts that are to be printed. Further, as of this writing, we cannot print drop shadows or any other image element or effect that uses transparency. We hope to have this limitation resolved in January or February of 2011.

Images can be placed onto a transparent background in a several ways. Some of the most common ways are: They can be crated right in Photoshop on a transparent background, another bitmap file type (such as a clean high resolution JPEG) can be placed into photoshop and the unwanted elements removed, or a vector art file can be opened directly into Photoshop on a transparent background. Some of these or other methods, especially the removal of unwanted elements in a JPEG image, might not be simple and might require work by a Photohop artist. Each case has to be evaluated on it's own merits.

The best quality images for this printing method are the original Photoshop (or tiff) files actually created in Photoshop at a high resolution, typically 300 ppi, or a 100% vector element image created in Adobe Illustrator. Most images sent to us are JPEGs. An important fact to be aware of is that virtually EVERY JPEG IMAGE of computer created artwork was originally created as a high resolution image in Photoshop or as a vector image in programs such Adobe Illustrator, CorelDraw, or similar programs. To create smaller files that can be more easily emailed as attachments or used on websites, these original larger hi rez files are COMPRESSED into the smaller JPEG files. This compression step discards file data and effectively "damages" the file quality permanently. Every time a JPEG is resaved, more data is discarded and the file quality is further permanently degraded. As you might suspect, some JPEGs have been degraded to a small degree, while others are degraded beyond practical use for printing purposes. Printing a good quality image requires a much better quality/resolution image file than does a website on which a low quality image can look quite good. It is highly advisable that you seek out that original higher quality/resolution image if at all possible. Additionally, all bitmap images have a real physical size. Enlarging such an image reduces the resolution proportionately. Further, while they are related, there is a difference between "quality" and "resolution" when talking about images. Just having high resolution (resolution for images is correctly stated by Photoshop as ppi - meaning pixels per inch, not dpi - dots per inch), does not mean that the file is good quality. Files that have been highly compressed will have "blotchy" looking spots in larger color areas, fine lines and text will have ragged edges, color fades and transitions will be crude, and so on. These files can arbitrarily be restored to a high resolution in Photoshop, but that does not resolve the low quality of the image for printing purposes. Image files taken from, or meant for, a web site are generally very small in physical size, not high in quality, and at a very low resolution of 72 ppi. Such an image will rarely be useable for this kind of printing.

If you have questions about the useability of your image file, we are happy to evaluate it for this purpose and to give you our best advice and options.

Please also be aware that, since this is true CMYK printing further adapted for t-shirt printing, we cannot match PMS colors.

**For art files we are using Illustrator CS5, Photoshop CS5, and CorelDraw X4.**

**WE CAN USE THE FOLLOWING FILE TYPES IF THEY MEET THE QUALITY/RESOLUTION SPECS SET OUT ABOVE:**

Adobe Illustrator Vector

CorelDraw Vector (not desired)

Adobe Photoshop PSD or TIF at or near 300 ppi original resolution

PNG file at hi resolution

PDF - If the file is good quality and adequate resolution. When used for art files, the PDF format is simply a container for another file type which could be anything from a low quality/resolution jpeg to a high quality Photoshop file, or something else.

EPS - Same as PDF.

**VECTOR FILES, ILLUSTRATOR or COREL:** Any 100% vector file will be at the highest resolution we need, and it will be scalable, meaning that we can enlarge or reduce it as needed with no loss in quality. Please be aware, though, if your vector file also contains embedded or linked bitmap images, those images will be affected by enlarging or reducing the size of the artwork. Also, we will not be able to know the resolution of that bitmap image. Our only way to evaluate that part of the image is to look at it on screen to try to observe the apparent quality.

**PHOTOSHOP:** These PSD or TIF files should be saved at the time of their creation at the default professional resolution of 300 pixels per inch (ppi) at or near the physical size to be printed. However, if they are not now at this high resolution, do not “upsample” them.

**PDF and EPS files:** These file types are frequently simply “containers” that hold images that could be anything from an Illustrator vector file to a low rez, poor quality jpeg, or several other things. This is frequently another situation in which we can only evaluate the image by visual inspection on screen.

Files that are too large to be email attachments can be uploaded to our FTP server at:  
<http://www.sendthisfile.com/f.jsp?id=5uMFwrUXNvcViuj82O2Ox2I3>

You can email art attachments to us at: [info@clearwatergraphicworks.com](mailto:info@clearwatergraphicworks.com)