

DESIGN GUIDELINES & BEST PRACTICES

General Design Considerations

In order to set yourself up for success in the POD industry, it's important to prepare your art files properly to optimize the quality of your final product. A high-quality art file will yield a high-quality final product. Taking the time to prepare your files properly will not only save you time & money in the long run, but it will help you maintain a great reputation for your online store. We've created this guide in order to help you avoid basic print file mistakes.

Product Decoration Details

Each item in our catalog has a designated print method -- we offer:

DIGISOFT™ & Dye-Sublimation.

The majority of our apparel products & bags are decorated by DIGISOFT™, though there are a few special garments decorated by dye-sublimation. Details about the decoration method for a particular product can be found in the in-app product catalog or the catalog at customcat.com/products.

Every hat in our catalog is decorated with sublimated vegan leather hat patches. Other accessories & housewares (drinkware, blankets, & ornaments) are printed directly with dye-sublimation.

We can print any type of design as long as the file's specs are up to par. However, it's important to consider the strengths & limitations of the decoration method used to customize your product when you're creating your art files.

Recommended File Formats (.png & .ai)

For the highest quality results, we recommend submitting **transparent .png files or .ai files at 300 PPI**, regardless of decoration method. Photos taken from a cell phone at 72ppi will also produce high quality results due to the large file dimensions.

Artwork submitted for large-format textile printing (like blankets) may be submitted at **150 PPI** without negatively impacting print quality.

The CustomCat platform will also accept .jpg files & vector formats .ai, .svg, .eps & high quality .pdf files .

Colors: RGB vs. CMYK:

We recommend using a CMYK color profile or sRGB colors to create your design files.

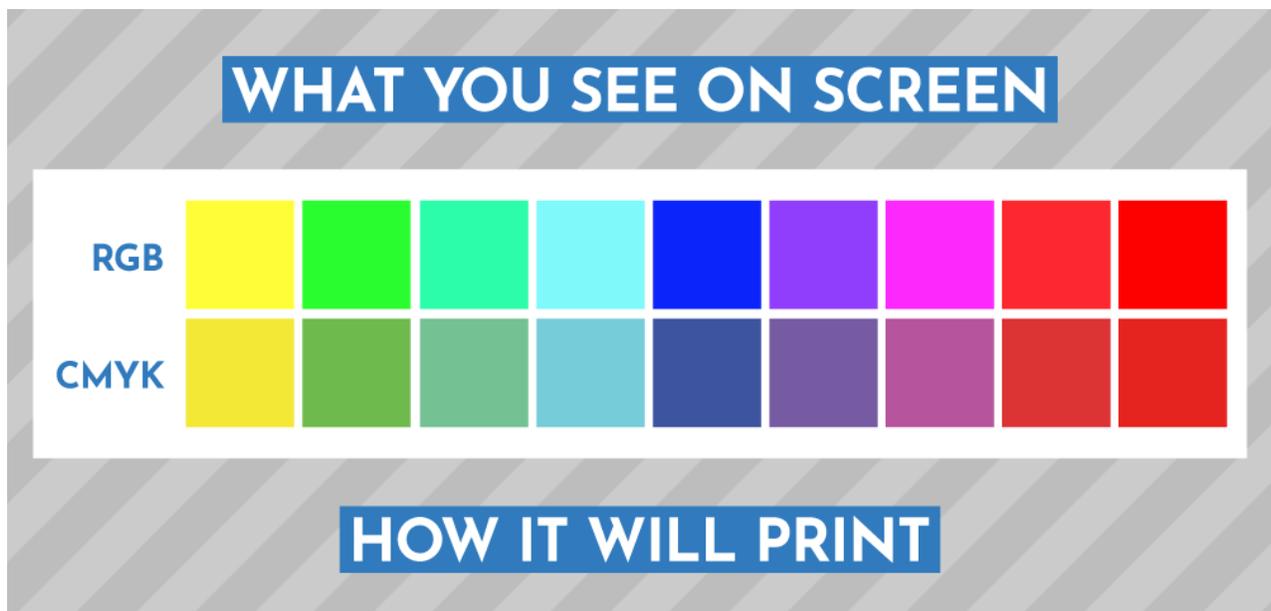
DIGISOFT™ can accurately capture all CMYK & print-safe sRGB colors.

What's the Difference?

Put simply, RGB colors are from a wider color spectrum than CMYK colors. RGB colors use light to create their vibrancy, so they're not always achievable in print.

RGB: Generally, when designers are creating images for use on screens, they will use an RGB color profile. RGB colors come from a wider spectrum & take into consideration that a screen is backlit -- RGB profiles can create very bright & vibrant colors. Using RGB color profiles to design your artwork will result in beautiful on-screen color that may not translate accurately to print.

CMYK: For all types of physical print, Cyan, Magenta, Yellow, & Black pigment is added together to create the print color. When a printer converts a file created with an RGB file into CMYK colors for print, they can lose quite a bit of their vibrancy unless the files were created with that process in mind. We recommend designing in CMYK color profiles or print-safe RGB colors (sRGB) for the most accurate on-screen representation of the print colors you'll see on a garment. When saving your artwork as a .png file, it will need to be converted into an RGB profile (but your colors will maintain more accuracy on screen).



We recommend using a CMYK or sRGB color profile to create your design files.

Clipping Masks (when Designing in Adobe Illustrator)

In order for our production system to read the graphic information accurately, you must expand the clipping mask within .ai files.



Copyright Images:

Use your own original artwork or obtain the rights to print copyright images.

We do not assume responsibility for copyrighted images. By registering for a CustomCat account & agreeing to our terms & agreements, you are stating that you are authorized to manufacture products with any copyrighted designs you submit.

We reserve the right to reject orders based on violation of copyright.

If you submit an order that includes a design that infringes on a known copyright or trademark, you will receive an email notification that your design has been flagged for further review. If it is determined that the print file includes copyrighted material, we will not fulfill any orders including the offending design & we will recommend you remove any products using the design from your store.



***Do not submit images for print that infringe on copyrights or trademarks.**

DIGISOFT™ GUIDELINES

Equal parts DTG (Direct-to-Garment) & DTF (Direct-to-Film) print processes, [DIGISOFT™ technology](#) combines the best qualities of each without their respective limitations. It harnesses the streamlined manufacturing power of DTG printing with the high quality & durable print quality of DTF printing. The result is a ground-breaking product that's visually-stunning, impossibly durable, surprisingly versatile, & objectively superior to the competition – delivered at a speed today's world demands.

DIGISOFT™ prints are known for a sharp, consistent, true-to-color look with a soft, wearable feel, & impressive longevity on any fabric.

DIGISOFT™ Max Print Dimensions/Size

Typically, when you submit a design for print with other on-demand printers, you're required to submit your art file in the exact dimensions you want it to print. This can become problematic when you sell clothing in multiple sizes because a design that is 9 inches wide will look different on a size XS shirt than on a size XL. As a result, you often have to upload multiple files for the same garment.

With CustomCat, we take care of image sizing for you, scaling your artwork to ensure your print size is proportional to the placement on your mockup. Below, you'll find the [maximum printable area](#) for each of our garment types. The maximum printable area is determined by the physical size of the garment & any special features it may have (like the pocket of a hoodie or a raglan sleeve, for example).

The listed dimensions indicate the largest possible print size for each garment type – these are typically achieved on sizes Large or X-Large. Your print will be scaled down proportionately from size L or XL to look as similar to your mockup as possible on smaller sized garments. Because of print size limitations, your print may be proportionally smaller on sizes 2XL+ than indicated in the mockup image.

When you create your products in the CustomCat platform, you can resize & reposition your design using the "Custom" positioning option & we will print it to closely resemble the mockup. The space within the Custom Positioning view represents the maximum print area. To utilize this full area, remove excess transparency from your design & select **"Full Front"** positioning.

Adult Crewneck Front/Adult Back:	<i>11.41 x 15.11 inches</i>
Adult V-Neck Front:	<i>11.41 x 12.12 inches</i>
Adult Hoodie Front & Crop Tops:	<i>11.41 x 11.41 inches</i>
Left Chest / Accessories / Bottoms:	<i>5.61 x 4.91 inches (4 x 3.5 aspect ratio)</i>
Youth Front/Back:	<i>10 x 12 inches</i>
Youth Hoodie Front:	<i>10 x 10 inches</i>

Positioning Presets for CustomCat Apparel Products

For apparel products, we provide **4 positioning presets** to choose from in the CustomCat platform. Select the appropriate positioning based on how you want your final product to look.

CC Preset: CC Preset positioning will automatically size, center, & position your artwork for you to align with apparel industry standards. Your artwork will be centered on the garment & positioned to what our experience tells us is the “ideal” size/placement for that garment. Your artwork will be scaled down proportionately based on garment size to look as similar to the generated mockup as possible. **Please select this preset if you want us to optimize the size & position of your design for you.**

Left Chest (& Left Chest Tall): If you’re placing artwork on the left chest of a garment, our Left Chest positioning presets will help optimize that process. These presets were designed to ensure your artwork is sized & positioned appropriately for each specific garment. Your artwork will be scaled proportionally based on garment size to look as similar to the generated mockup as possible. Please avoid using “Custom” positioning for designs intended to print on the Left Chest of a garment. **Left Chest preset should be used for designs that are wider than they are tall. Left Chest (Tall) should be used for designs that are taller than they are wide. Either preset can be used for square designs.**

Full Front/Back: Full Front & Full Back positioning give you access to the maximum print size for each apparel product. The dimensions listed on the previous page indicate the maximum print size for each garment type – these are typically achieved on sizes Large or X-Large. Your print will be scaled down proportionately from size L or XL to look as similar to your mockup as possible on smaller sized garments. The maximum printable area is determined by the physical size of the garment & any special features it may have (like the pocket of a hoodie or a raglan sleeve, for example). **Please select this preset if you would like to utilize the maximum printable area available for that garment or if you have created artwork to our max print dimensions.**

Custom: Custom positioning allows you to resize & reposition your design on the garment to achieve your desired output size. The design area within the Custom Positioning interface represents the maximum printable area for that garment. The standardized aspect ratios for garments by type are listed on the previous page. Your print will be scaled down proportionately from size L or XL to look as similar to your mockup as possible on smaller sized garments. *Please use the design centering button in the designer to ensure your design is centered within the printable area if you intend for it to be centered.* **Use Custom Positioning if you would like to achieve a print output that differs from the available presets.**

****Please avoid using “Custom” positioning for designs intended to print on the Left Chest of a garment.**

Printing at Exact Artwork Dimensions

If you would like to submit artwork to be printed in the exact size of your art file, you can use our API or CSV Ordering processes with a DesignURL & select “Exact Artwork” during order submission. For more details about the CSV ordering process, please visit our tutorial at customcat.com/tutorials/csv-tutorial/.

When using the “Exact Artwork” option with CSV ordering, it is vital that you prepare your files *exactly* as you want them to print. They will not be scaled up or down unless your submitted artwork is larger than our maximum print output for that product, in which case it will be scaled down to fit (without modifying the aspect ratio of the design).

DIGISOFT™ designs MUST be sent at 300 dpi to retain exact artwork dimensions for CSV orders.

Using our [Bulk Uploader](#)’s “Exact Artwork” option will ensure the transparent space within your design is maintained. However, this process differs from CSV ordering in that ***your design will be scaled down for smaller garment sizes (X-Small, Small, & Medium).***

Your design will be scaled down proportionally for smaller sizes in order to reflect your mockup, but in order to have your design printed at the exact size you want on sizes Large & above:

- Create your artwork on a canvas of **11.41” x 15.11” for the front of a crewneck t-shirt** (or the stated maximum print dimensions stated on the previous page for the product type) & place it exactly where you want it on that canvas within your design program. The top of your file is generally positioned 30mm from the bottom of the collar.
- Upload to CC's Bulk Uploader with "Use Exact Artwork Dimensions" trim option selected.
- Select "Full Front" positioning on your garment.

Art File Dimensions/Resolution:

DIGISOFT™ is able to capture significantly more detail than its DTG counterpart. Because of this, using a high resolution file will yield pretty incredible results. On the other hand, our high resolution output makes it a little more obvious when you use a lower resolution file.

We recommend designing at print size with 300 ppi rather than resizing your images to fit the print dimensions. Resizing your images may leave semi-transparent pixels around the edges of your design, leading to a less crisp printed image.

For designs intended to utilize the full 11.41" x 15.11" print area:

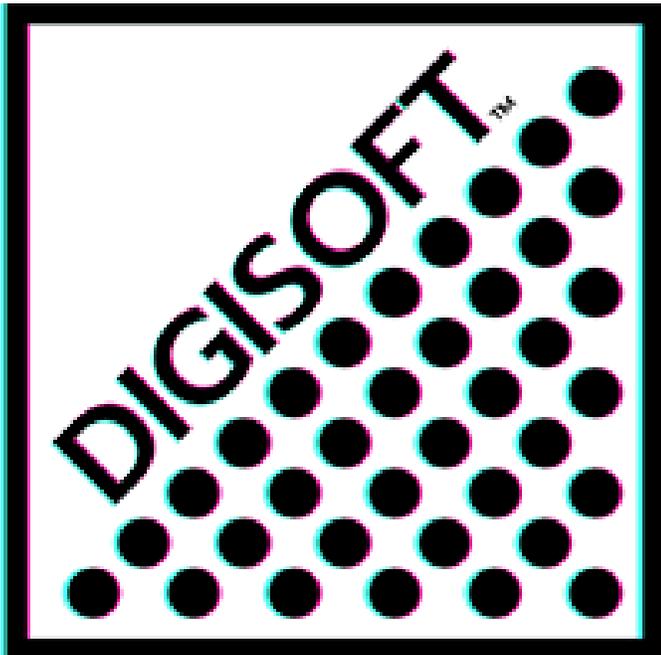
Art File Dimensions:	<i>3420 pixels x 4533 pixels</i>
Resolution:	<i>300 pixels per inch</i>

For designs intended to utilize ONLY the 5.61" x 4.91" Left Chest or Accessory decoration area:

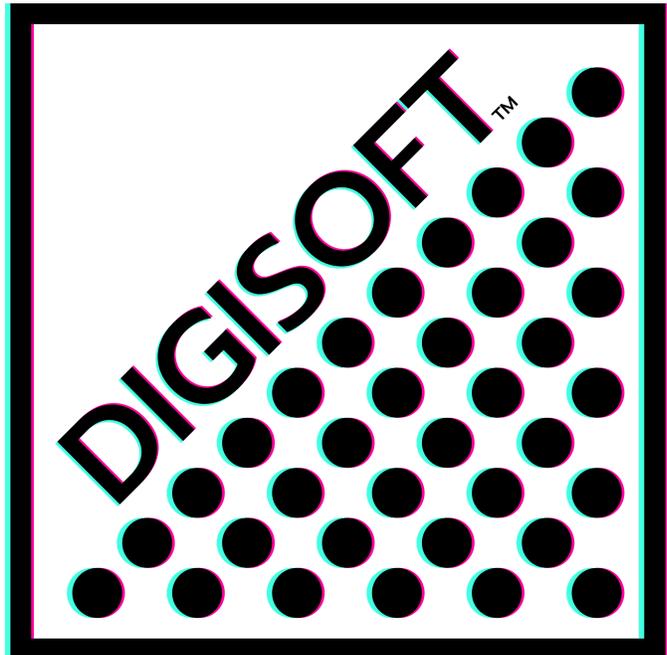
Art File Dimensions:	<i>1683 pixels x 1473 pixels</i>
Resolution:	<i>300 pixels per inch</i>

Designs that are low resolution will print with low quality. **This is particularly important with DIGISOFT printing, as DIGISOFT is capable of capturing the detail in high or low resolution designs.** Ensure the edges of your artwork are clean & crisp at print size, without being blurry or jagged.

Low Resolution:



High Resolution:



Special Design Considerations:

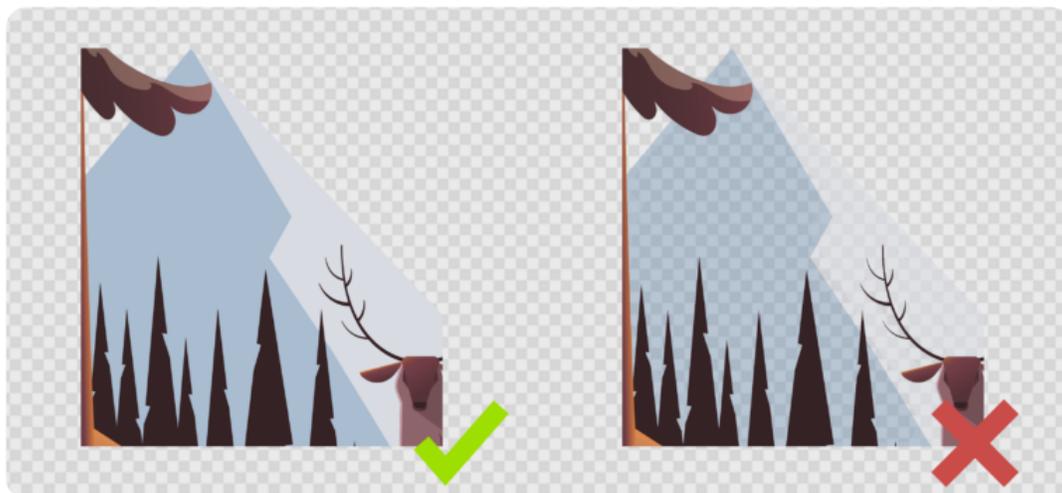
Use areas of transparency in your design for a softer handfeel.

If you're looking for a barely-there handfeel on your garments, you can use areas of transparency throughout your design to achieve a more lightweight print. A big block of ink will always feel heavy regardless of the decoration method, but DIGISOFT™ allows designs with areas of transparency to blend nicely with the garment, giving a much softer handfeel than other print types on the market.



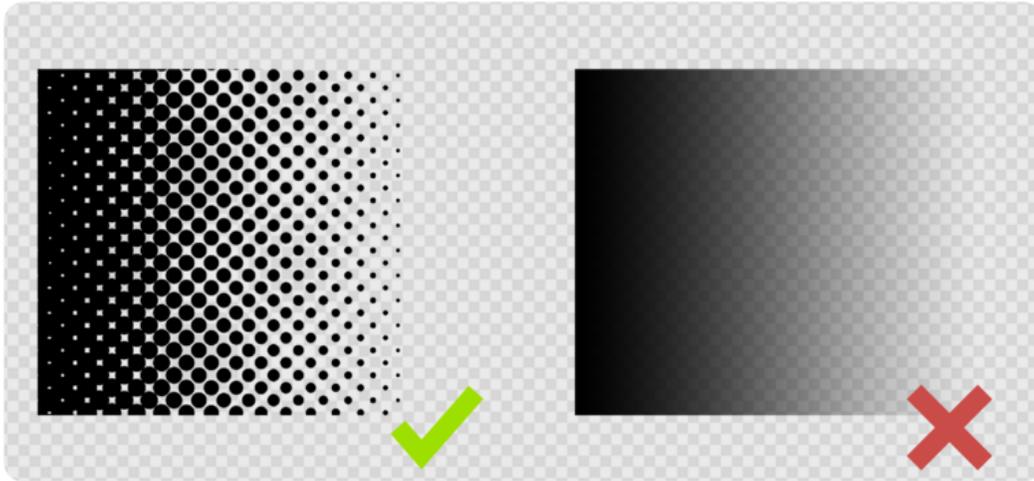
Use 100% opacity in your design elements.

In order to ensure the most vibrant print colors, be sure to use 100% opacity in all your design elements. Similar to DTG, DIGISOFT™ uses a base layer below pigmented ink to help your print bind to the garment. When there isn't enough pigmented ink laid on top of that base layer, you may experience muddier print colors. Stick with 100% opacity for full vibrancy.



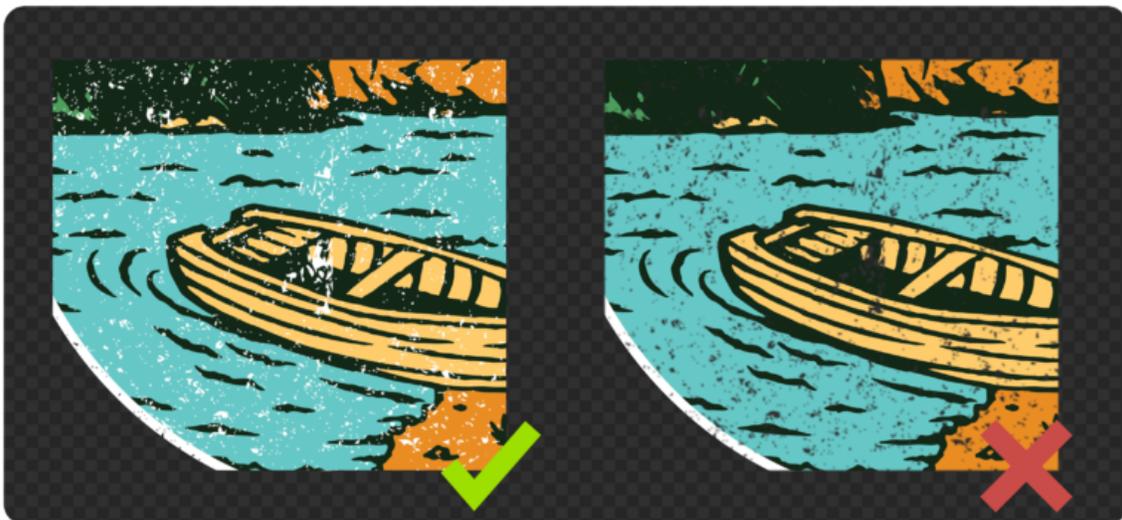
Avoid transparent gradients – Opt for halftones instead.

Just as you want to use 100% opacity in your design elements, you'll also want to avoid effects like Glow, Smoke, & other types of transparent gradients that rely on reducing the opacity of your pixels. Instead, opt for halftones, which use dots of 100% opacity that reduce in size & density as they move further away from the main design elements. Gradients from one color to another will print beautifully with DIGISOFT™, but avoid gradients that fade from one color to transparency.



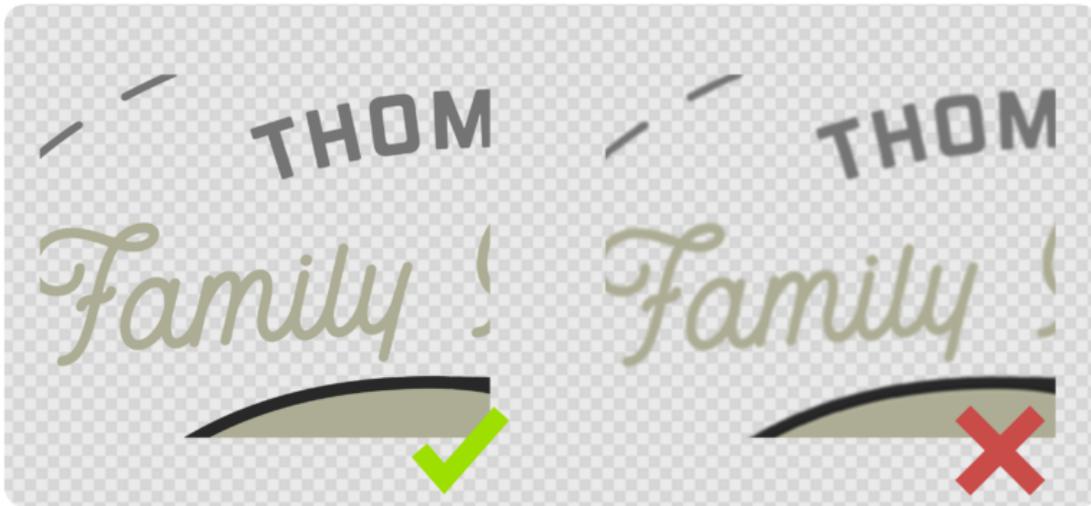
Use background color to achieve distressing rather than relying on low opacity pixels.

If you want to achieve a distressed look, try adding a white background layer behind your distressed design elements. This will allow you to achieve a “scuffed” appearance without compromising print quality. If you want to use more traditional distressing techniques, try removing semi-transparent pixels afterward for a cleaner result.



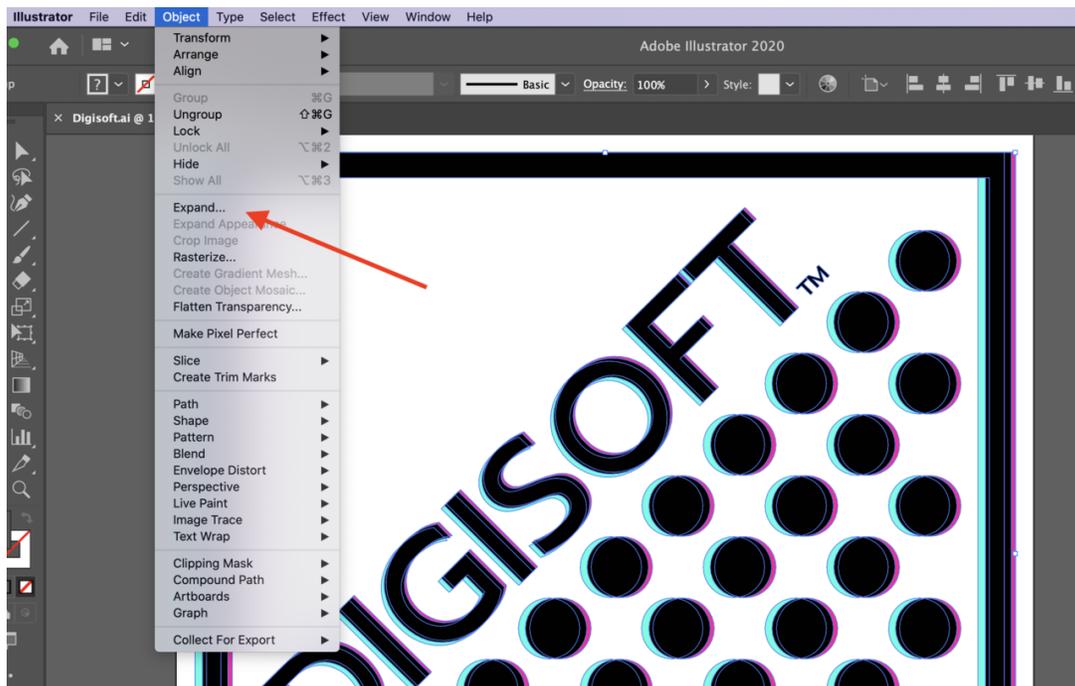
Ensure the edges of your design elements are clean & contain no stray pixels.

Following the guidelines above will ensure that the edges of your design are clean, but it's worth mentioning again – anything that is included in your design will be printed with DIGISOFT. That means if you accidentally leave a few stray pixels in your design file, they will print. Similarly, if you resize your file from a smaller size, it may leave semi-transparent pixels around the edge of your design elements. The cleaner the file, the cleaner the print!



Expand Clipping Masks (when Designing in Adobe Illustrator).

In order for our production system to read the graphic information accurately, you must expand the clipping mask within .ai files.



Monochromatic Design Elements:

DIGISOFT™ printing allows for monochromatic printing on garments the same color as your design. For example, if you want to print black text on a black hoodie, you can do so with DIGISOFT™.

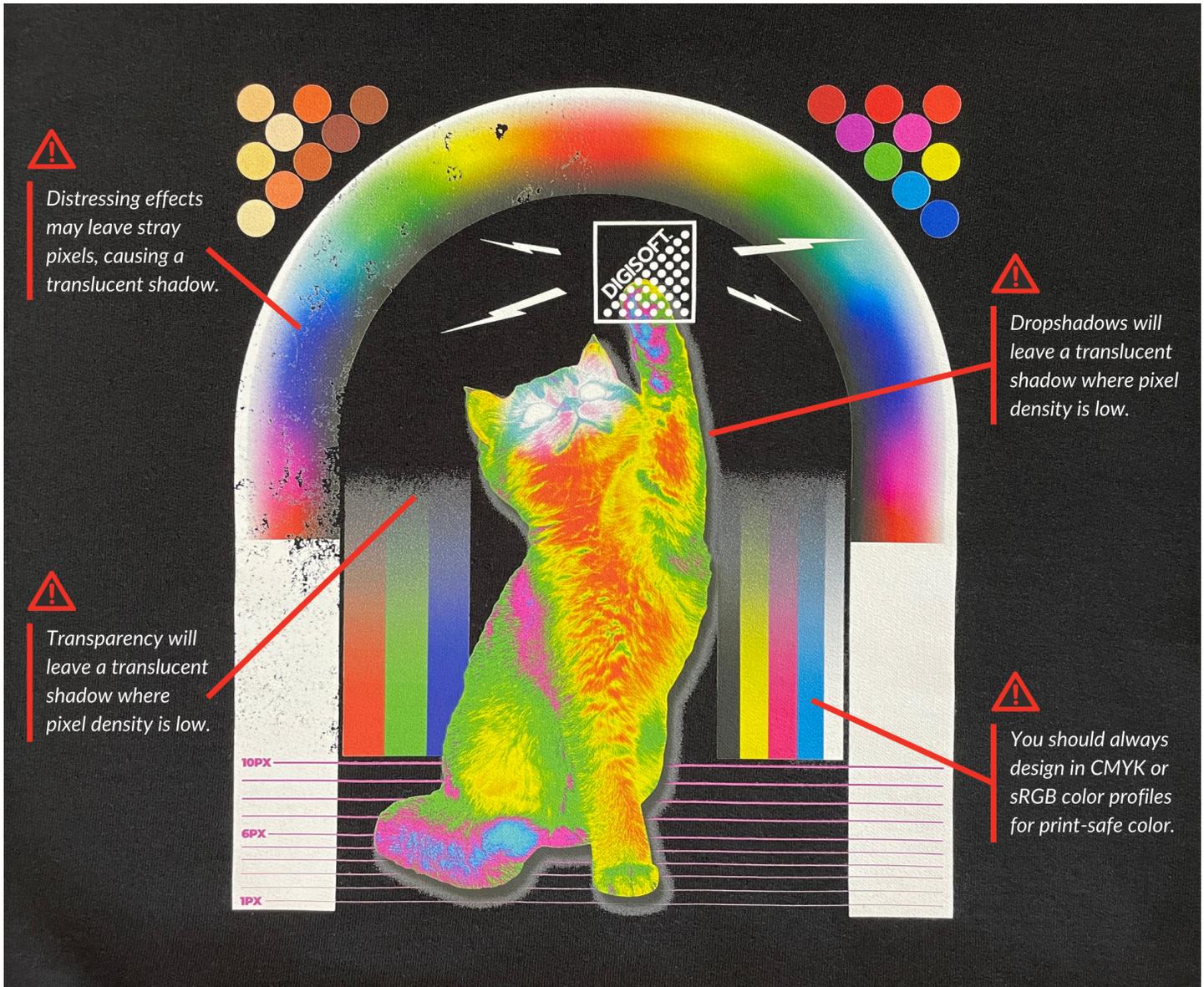


Keep in mind that every color in your design will print with DIGISOFT™. That means if you submit a design with a black background, *the black background will be printed*. Similarly, a design submitted with a white background will be printed with a white background (regardless of garment color).

Please submit files exactly as you want them to be printed.

Transparent Gradients: (Drop Shadow, Glow, Smoke, etc.)

When using transparent gradient effects, the binder used to make your DIGISOFT™ prints pop will be visible in areas of high transparency. For best results, avoid the use of transparent gradient effects (like Drop Shadows, Glow Effect, Smoke Effect, etc.) in files printed with DIGISOFT™. Please reference sections above for preferred design styles to achieve similar effects.



DYE-SUBLIMATION GUIDELINES

Dye-Sublimation printing is a specialized decoration method that allows for decoration of solid materials like ceramic mugs & synthetic fibers like polyester. In order to decorate your custom sublimated products, we print your designs on specialized paper with a specialty ink & apply that paper to your products. When heat & pressure are applied, the ink enters a gaseous state & is accepted into the material that's being decorated. Sublimation printing is incredibly durable & will not fade, flake, or crack, as the dye truly becomes part of the product itself.

****No white ink is used in dye-sublimation.** If you have white elements in your designs, it's important to be sure that the blank product you're printing on is white. CustomCat's only non-white blank sublimation product is currently Silver Travel Mugs. For this product, no white design elements should be used. If they are used, please note that they will not be printed.

How to Design for Dye-Sublimation Products

For Dye-Sublimation products, you have the following 3 positioning options to choose from in the CustomCat app. Select the appropriate positioning based on how you want your final product to look.

CC Preset: This positioning should be used if you are uploading a transparent .png file & would like CustomCat to optimize the positioning of your design for you. This positioning differs by product, but most often your design will be resized & centered on the final product. *For all drinkware (except water bottles), CC Preset will duplicate your design & center it on both sides of your product so it's visible while holding the product by the handle for both left & right handed customers.*

Custom: If you'd like to size & position your design on your product yourself, select "Custom" positioning. This will allow you to resize & drag your design around on the design area until you're happy with the placement. Be sure to review your mockup after modifying your positioning to be sure your design is positioned & sized the way you want. We will print your product based on the positioning you submit & cannot issue replacements if placement is consistent with your mockup.

Full: Only select "Full" positioning if you've used a CustomCat Art Template specifically for the product you're designing. These art templates are specific to each dye-sublimation product & designed to utilize the entire available printable area. For drinkware, using CustomCat art templates will produce a "full wrap" effect.



How to Use a CustomCat Art Template:

CustomCat provides Art Templates for all dye-sublimation products. The templates are designed to act as a guide to help you optimize your design positioning, artwork dimensions, & resolution (DPI). Art Templates for each of CustomCat's dye-sublimation products can be downloaded here:

<https://customcat.com/guides/resources/artwork-guidelines>

To use CustomCat's Art Templates, open the .png or .psd files in your design program, or a free online design tool (like PhotoPea, Pixlr, or GIMP**). Next, insert your artwork as a new layer in the document.

Position your design elements within the designated safe area, but be sure to fill the template from edge to edge if you want to utilize the maximum print area.

Lastly, hide or delete the CustomCat Art Template layers & save your design as a .png file.

Within the CustomCat app's Add Product flow, select your product & upload your design. **"Full positioning"** should be selected to utilize the max print area of the product.

To upload this file directly to your CustomCat Design Library (rather than when designing your product), please use our Bulk Uploader, selecting "Use Exact Artwork Dimensions" from the dropdown menu. This will ensure that any excess transparent space is respected & your design is positioned exactly how you want it.

Safe Area

All important design elements should be placed within the noted "Safe Area" on the design template. Design elements placed within the Safe Area can be expected to print on your final product. If elements of your design are positioned outside this safe area, they may not be printed.

The Bleed

"The Bleed" is the outer edge of the design area on our Art Templates. In order to ensure there are no white unprinted areas on your final design, it's vital that you fill the entire template (including the bleed area), submitting a design in the same dimensions as the template itself.

If you forget to fill the entire template, your final product will not be printed from edge to edge.

**CustomCat is not affiliated with any of the aforementioned online design services