

# LENTICULAR DRINKWARE DESIGN GUIDE

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VIRTUAL IMAGES

## Creating a Successful Lenticular Cup

Virtual Images is the leading provider of high-quality injection-molded lenticular labels, lenticular plastic drinkware and accessories. By following these guidelines you will ensure an end product that engages your customer and drives brand recognition.

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## Getting Started

Contact your sales rep to receive a digital cup template file that is designed to fit your artwork's specifications. The file will be a Photoshop template at 100% of size, with a resolution of 300 dpi. It will be similar to the illustration below.



### PHOTOSHOP TEMPLATE (300 DPI)

- LIVE AREA:** All critical elements must remain inside this area.
- TRIM:** This corresponds to the diecut area once the art is warped.
- BLEED:** All elements that bleed must extend to this line, as a minimum.
- DOCUMENT SIZE:** Photoshop page size. Do not change.

Your art needs to be provided as a **layered CMYK Photoshop file**, with a resolution of 300 dpi, built in the supplied template. Your art should not be rotated or distorted for the curvature of the cup. Our lenticular artists will manipulate your art for the desired lenticular effects, as well as warp your art to fit the curvature of the desired cup.

Be sure to include **ONLY** layers that are actually used in your final art. Unused working layers should be discarded. Also, whenever possible, avoid using complicated layer blending modes. Often-times we must flatten these layers, resulting in non-desired changes to the image. Also, keep all text as vector art in Photoshop; do not rasterize.

### YOUR SUPPLIED ART



### WE WARP THE ART TO FIT THE CUP



### ART REVIEW

We encourage you to let us preview your art before your actual order. Our Lenticular Department will be happy to provide a **FREE** technical review and make suggestions that will possibly save you time and money.

- Include a content page which details documents and file names to be used and their purpose.
- Via ftp site, e-mail a content page to your CSR or Salesperson.
- Include all screen and printer fonts that were used, in a separate font folder.



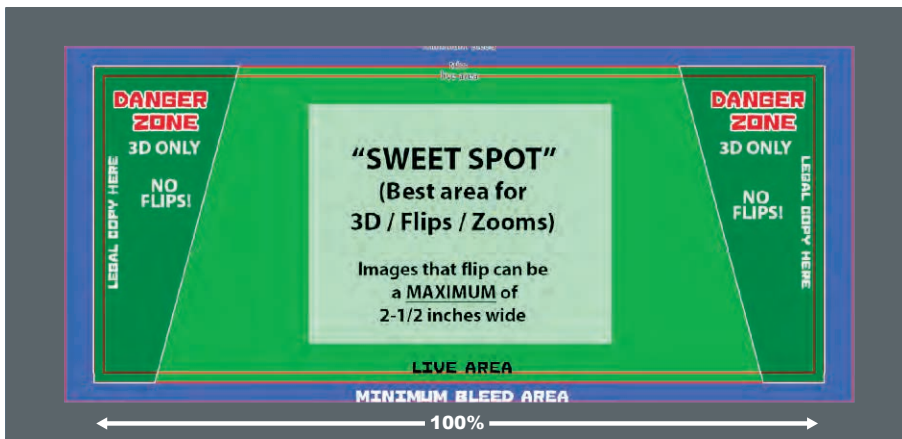
## DESIGNING FOR A LENTICULAR CUP

The “sweet spot” for lenticular effects (both 3D and/or 2-phase flips) is located in the middle/center of the cup wrap. In this area, the lenticules of the lens are **perpendicular** to the art and the cup. As you move further away from this area, the lenticules are no longer perpendicular to the cup and the lenticular effect for 3D and animation is negated to varying degree. It’s imperative to place important 3D and animation in this “sweet spot” area.

The curved surface of the cup reduces the effective area of lenticular animation. It’s **necessary** to keep important subjects/logos smaller than the width of the finished cup. Any wider than this and the lenticular effect will not be a smooth, clean transition, distracting from the look of the finished piece. **A good rule of thumb is to keep the critical image at least 1/2” less in width than the finished cup.** Please contact your sales rep for information about the

maximum image width on your cup.

Remember as you conceptualize and design the cup art, that **3D with or without 2-phase flips works the best.** In some cases additional animation effects may also be possible, depending on the art. Try to design in several zones around the cup, keeping in mind element width and the optimum “sweet spot” position for critical animation. This will make for a cup that is technically sound and enjoyable to view from all angles. **Keep animation away from the “Danger Zones” as shown above.** (3D is acceptable in these areas.) Choose a background that contains texture and spans the entire cup, avoiding solid colors, areas of white, or dominant horizontal lines. The background is meant to act as a 3D layer only, and cannot animate/flip. Finally, legal copy works best when placed along one of the edges of the cup at the seam.



## FONTS

Fonts are subject to copyright and license protection in substantially the same way that software is subject to such restrictions. While we have established a large font library with all the appropriate licenses, occasionally certain fonts used by our customers or their designers are not included in our library.

Since using non-editable files is not always a reasonable alternative for our customers, we ask that you still in-

clude the fonts used in your artwork. This will give us the needed information to obtain licenses for the fonts used. When working with text in Illustrator or Freehand, we recommend that you do not convert text to outlines since it limits our ability to make corrections at a later time.



## Animation Guidelines

### 2-PHASE: (REQUIREMENTS/RECOMMENDATIONS)

- Save art out in a layered format. DO NOT SEND FLATTENED FILES, as we often have to manipulate graphics and text for quality.
- Small copy and thin rules will tend to break up under the lens. We can supply you with a sample of the lens on which your project will be printed, in order for you to assess the degree of effect that the lens will have on your art. Avoid outlined and Serif fonts on coarser lenses. If they are necessary, point sizes need to be larger.
- Avoid animating two highly contrasting images, or animating over a white or light background. This will result in an undesirable ghosting effect, where the "off" image can still be seen within the "on" image. A light background may be used if the flipping elements stay in one location so that the first phase of animation covers the second phase, and vice versa.
- 2-phase flips may be combined with other lenticular effects on the same piece.
- You may request a soft-proof of the animation (typically an animated GIF or Quicktime movie) before moving on to a hard proof.

### ZOOM (REQUIREMENTS/RECOMMENDATIONS)

- Zoom animations can consist of type and/or graphics that change size, spin, or move in any combination.
- Optimum Zoom animations work better when the background is a cool darker color with the zooming element a lighter and warmer color than the background.
- Avoid animating two highly contrasting images, or animating over a white or light background. This may result in an undesirable ghosting effect, where the "off" images can still be seen within the "on" image. A light background may be used if the zooming elements stay in one location so that each phase of animation covers the prior phase.
- Save art out in a layered format, with those elements that are zooming on their own layer. DO NOT SEND FLATTENED FILES, as we often have to manipulate graphics and text for quality.
- It is not necessary to supply all of the "in-between" images of a zoom. The beginning and end are often sufficient, unless the animation is complicated. In that case, the number of individual frames available for animation will be determined partially by the lens being used, as well as the desired effect. Please consult with your CSR or salesperson. They will seek the recommendations of our Lenticular Department.
- You may request a soft-proof of the animation (typically an animated GIF or Quicktime movie) before moving on to a hard proof.

### MORPH (REQUIREMENTS/RECOMMENDATIONS)

- All graphics and text needed to create the morph animation should be incorporated into separate layers in one Photoshop file: the file should have the background on a separate layer; the beginning morph element on a separate layer; the ending morph element on a separate layer. DO NOT SEND FLATTENED FILES
- Supply a color printout of the beginning and ending morph images. Indicate the scale % on the printouts if not at 100% size.
- Small copy and thin rules will tend to break up under the lens. We can supply you with a sample of the lens on which your project will be printed, in order for you to assess the degree of affect that the lens will have on your art. If they are necessary, point sizes need to be larger.
- The most effective Morphs use images with similar shapes, such as one person changing to another person, although it is possible to morph any two images.





- Morph animations work best when the background is constant and does not change.
- Morph animations work best if the morph effect occurs in a stationary location.
- Sharp, clear images are needed for smooth animations.
- If you would like to supply all of the images in a Morph, please consult with your CSR or Salesperson. The lens being used will dictate the number of usable intermediate steps between the beginning and ending of the Morph animation.
- You may request a soft-proof of the animation (typically an animated GIF or Quicktime movie) before moving on to a hard proof.

### 3D (REQUIREMENTS/RECOMMENDATIONS)

- Supply a layered Photoshop file with each layer (or group of layers) representing a plane of depth. In order for us to create 3D, the file must have a minimum of two layers: (1) a focal/foreground plane and (2) a background layer. The background layer must have some texture (as in a photo) or pattern to it. The background cannot be a solid color.
- Having additional intermediate layers helps create a better 3D illusion.
- There is no maximum to the number of layers in your Photoshop file, but make sure everything is properly separated. If Object B is to appear behind Object A, Object B should look complete if you were to remove Object A from the composition. This may mean that you will have to create/clone parts of Object B if they didn't exist before in your original art (as is the case when cutting apart a photo/scene for the various layers in Photoshop).
- Optimum 3D Lenticular works better when the background and back layers are cool colors and the focal and foreground plane elements are warmer colors.
- Sharp, clear images are required for good 3D. Do not artificially blur background images. There will be some blurring already as a result of the 3D process.

### LENTICULAR CUP DESIGN CHECKLIST

1. Decide for what cup size you will be designing.
2. Use the Photoshop template provided by your Sales Rep.
3. Build your art in layers within Photoshop. (No Illustrator files, please).
4. Make sure your art extends fully to the "Minimum Bleed" area shown in the template.
5. Be aware of the "Live Area" shown in the template. Keep text and logos inside of it.
6. Create your art in the CMYK color mode at 300 dpi.
7. Keep in mind that the template wraps around a cup and you will only be able to view a partial region of the art at one time. This area is equal to approximately 1/3 of the total width of the art. The actual width will vary depending on the size of your selected cup.
8. The best spot for animation is the "Sweet Spot." Keep animation out of the "Danger Zones."
9. Do NOT animate white objects. Ghosting and ink-registration problems will occur.
10. Zooms must occupy only the "Sweet Spot" area.
11. Flips are absolutely limited to three, and more preferably, two phases.
12. For best 3D as well as alleviating ghosting issues, choose a background that contains a pattern or texture and spans across the entire width of the cup. Avoid solid colors, horizontal lines and the color white.
13. Legal copy works well along the outer left or right edge.
14. Small, thin text and vertical lines will break up under the lens. Keep stroke thickness above 1 pt. to avoid this.
15. Submit a preview of your art for a FREE technical review prior to beginning the job.



## Sending Art Files

### APPROVED APPLICATIONS *(Up to and including current versions)*

Adobe Photoshop (.psd / .tif / .pdf / .eps)  
Adobe Illustrator\* (.ai / .eps)  
Adobe After Effects\*  
Macromedia Freehand\* (.fhX / .eps)  
Adobe InDesign\* (.indd)  
QuarkXpress\* (.qxd)

\*Be sure to include linked graphics with all files, if applicable.

### TRANSFER MEDIA

- **Disk** ..... CD ROM / DVD ROM
- **FTP** ..... Contact for information
  - Uploading files to the FTP site requires an FTP client such as Fetch or WS FTP.
  - We prefer that Drop Stuff is used to compress the files before uploading to the FTP site.
  - If you are uploading files to our site, please notify your CSR or Salesperson.
- **E-mail** .... prep@traveltags.com
  - Maximum file attachment is 5MB.
  - If file compression is necessary, please use Drop Stuff.
  - If you are sending files to our e-mail, please notify your CSR or Salesperson.

### PROOFING SIZE

Our high-quality lenticular proofs are created to give you the best possible approximation of how your final printed piece will look. Because of lenticular proofing limitations, art in excess of 20" in any dimension may require a proof that is half-sized. Please consult with your CSR or Salesperson.