



# VisionInk Design Guidelines

Discover the true capabilities of glass

[www.glasshape.com](http://www.glasshape.com)

## Overview

The VisionInk® digital ceramic glass printer is the most advanced and versatile glass printing machine available; ideal for both external and internal architectural and transportation glass applications. With VisionInk's image processing software, this high-tech printer goes far beyond the capabilities of traditional screen and UV glass printing; providing greater opportunity, flexibility, and quality in designing with glass. With thousands of possible colours, 720dpi resolution and the ability to control precisely the ink thickness, **VisionInk** provides unfettered scope of design.

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## How it works

**VisionInk** can replicate any image, design or pattern with brilliant accuracy, vibrant colours and sharp resolution. From simple lines to full colour photos, **VisionInk** allows architects, engineers and designers to explore new possibilities in modern and sustainable design in commercial, residential or civic contexts and beyond.

### Colour

**VisionInk** uses 6 'spot' colours (blue, green, white, orange, red & black – BGWORK) to generate the hundreds of thousands of other colours possible with ceramic inks. This is a close match to the CMYK (cyan, magenta, yellow, black) 'Process' colour that paper based print methods use. Our software will convert any image file colour-mode to BGWORK however we get the best result from an RGB file. Bright pinks are not possible to print – this is due to a lack of magenta in our colour mix (a magenta ceramic ink given current technology would need to be toxic (lead or cadmium based)). Because **VisionInk** has its own unique colour-mode, any PMS/RAL colours will be a 'visible' match. The best results come from converting an image file that is in RGB colour mode.



### Digital Processing

You can supply a final image file that Glasshape® will convert to **VisionInk** colour mode, or engage our in-house design team to manipulate imagery to your specification. We recommended getting in touch with us as early in the project as possible to confirm we will be able to accurately replicate your artwork with our printer.

### Print Ready Artwork

Ideally, the artwork you supply should only contain information that you wish to be printed. Please ensure your artwork layers are orderly and easy to work with. When processing your file we may need to apply settings to some layers. If you require advice or assistance with this, please contact our **VisionInk** Design Team.

### VisionInk Design Services

With **VisionInk** the options to create artistic designs in glass are endless. Using the inherent transparent attributes of glass, a Designer can add functionality to their artwork. To get a better understanding of this and to assist you in realising your design concepts, please contact our **VisionInk** Design Team.

### Client Approval

As part of our service to you, we will provide you with a PDF proof, prior to the printing of your artwork, to ensure the positioning, scale and any other details are correct. Additional to this, we can provide a finished sample of the artwork printed onto an A4 sized glass panel at a small additional cost.

## Vector Graphics

The benefit of Vector Graphics is that they can be scaled to any size with absolutely no distortion or loss of resolution, which makes them ideal for large format graphics, which is where VisionInk® really excels.

### Layers

Please ensure your artwork layers are orderly and easy to work with. When processing your file we may need to apply settings to some layers. If your artwork includes Text elements then please ensure this is on a separate layer.

### Text To Outlines

If your artwork includes Text elements, then please ensure you convert these to Outlines prior to sending your artwork to us for processing.

### Logos

When printing logos with **VisionInk** please provide your logo in vector format.

### Colour Matching

If you require accurate colour matching, please provide a Colour Code for each respective Colour contained within your artwork. For the best result we prefer you to provide either a Pantone reference or RAL Code. If you don't have any of the previously mentioned Colour Codes, then please supply a RGB value instead.

### Spot Colours

Please remove all spot colours from your artwork by converting to RGB (or native colour mode).

### Important Notes

- When providing a piece of artwork which includes both Vector Art and Pixel Art, please read the section on resolution included in the [Photo Realism](#) section along with this.
- Please read the information about printing [Colour](#) on page 1 and the [Artwork Layout Guides](#) on pages 4 & 5 to ensure your artwork is provided correctly.

Vector Art - Graphic Requirements	
<b>File Format:</b>	AI, EPS, PDF or DXF
<b>File Preparation:</b>	Standard graphic preparation via image and graphic applications such as Adobe Illustrator
<b>Colour mode:</b>	RGB colour mode preferred (CMYK is accepted)
<b>Images in file:</b>	Embed images, or send as attached
<b>Text in file:</b>	Outline text within file and include on a separate layer
<b>Facade Multi Panelling:</b>	Implementation via DXF or PDF

## Photo Realism (Pixel Images)

Our 720dpi resolution near full colour printer produces photographic quality print in glass. Conversion to BGWORK colour mode influences the final result and we will advise the recommended approach for Client Approval.

Pixel based images (including all photographs) lose resolution when scaled up. As a general rule, aim to supply the original high resolution image. We can always scale down and the original is the best file to scale up.

## Camera Specification

Using a high quality camera which is able to take high resolution pictures (measured in mega pixels) will give you the best results, especially if you intend to scale an image up when printing with VisionInk. If you don't have access to a camera, we recommend you consider engaging the services of a Professional Photographer in order to get the best result.

## Dimensions

If possible please provide your digital file at a 1:1 scale - the same physical size as the final printed work. (These dimensions are not referring to pixel ratio or resolution).

## Resolution

Consider the project and the end user's viewing distance when making a decision on a resolution. For larger viewing distances we can accept lower resolutions. Please supply us with the highest quality image and we will advise what is possible. We prefer to work with high resolution files:

Recommended Minimum: 300ppi

Recommended Optimal: 300 – 600ppi

Recommended Maximum: 720ppi

## Recommended Resolutions for Standard Viewing Distances

Below is a guide for specific viewing distances:

- 1 metre Viewing Distance - Resolution 300ppi+
- 10 metres Viewing Distance - Resolution 72 - 150ppi+
- 25+ metres Viewing Distance - Resolution 10ppi+

Photo Realism - Graphic Requirements	
<b>File Format:</b>	PDF, JPEG, TIFF, PSD, GIF, PNG, Raw Camera Files
<b>File Preparation:</b>	Standard graphic preparation via image and graphic applications such as Adobe Photoshop
<b>Colour mode:</b>	RGB colour mode preferred (CMYK is accepted)
<b>Images in file:</b>	Embed images, or send as attached
<b>Text in file:</b>	Outline text within file and include on a separate layer
<b>Facade Multi Panelling:</b>	Implementation via DXF or PDF

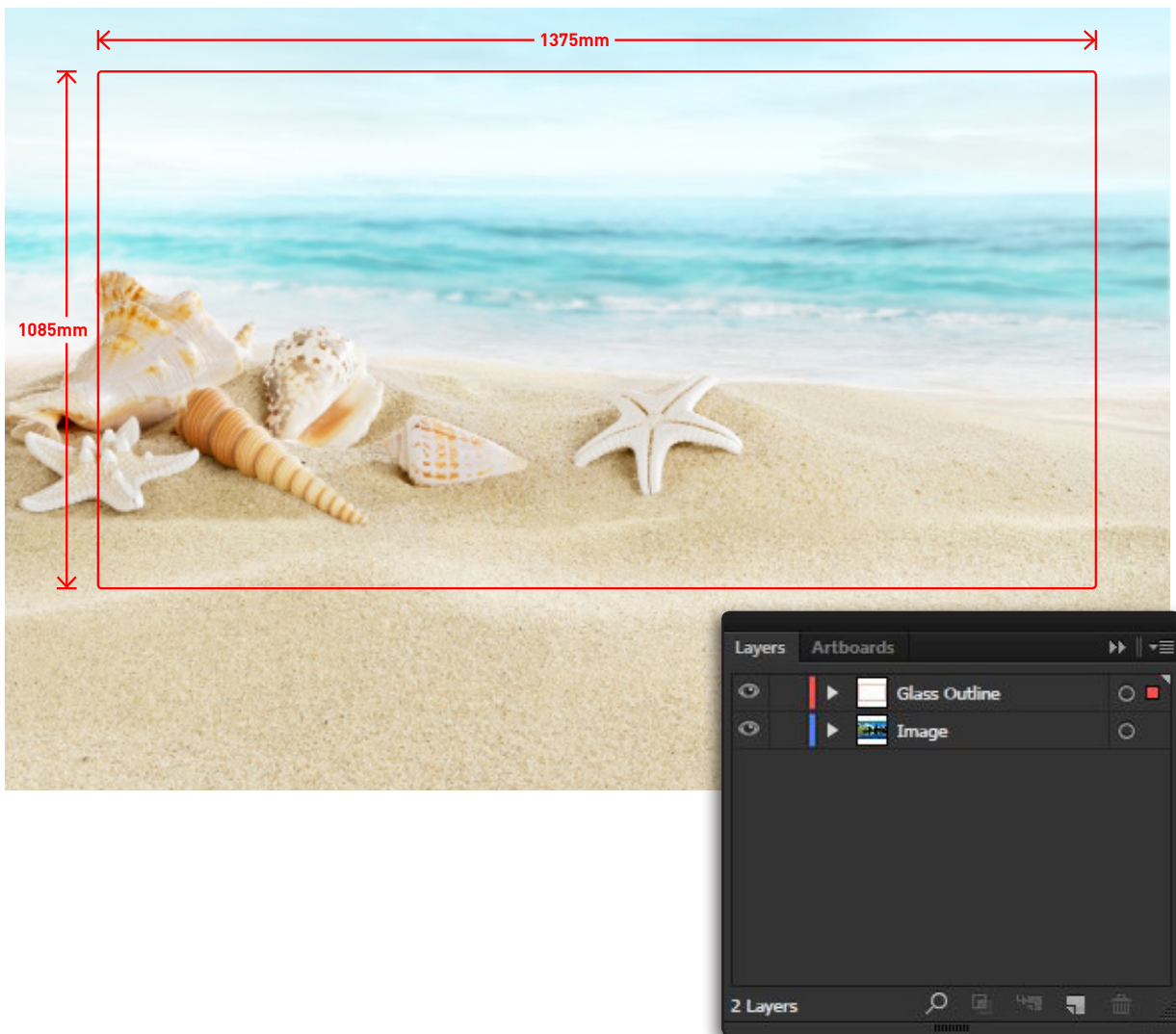
## Artwork Layout

When providing artwork to **Glasshape**, please ensure you provide clear instructions on the positioning of your artwork on the finished piece of glass. If the project requires that the artwork be split up over a number of glass panels, then please provide a layout which clearly identifies each panel of glass and the corresponding section of artwork. An example of this can be seen in the Multi Panel section of this document.

## Positioning & Cropping

If your artwork is not cropped to the finished panel size, then please provide us with some indication of where the artwork is to be positioned on the glass.

The illustration below provides an indication of a piece of Artwork being positioned relative to the size of the glass on which it will be printed. Please provide this keyline (Red Rectangle) on a separate layer called "Glass Outline". Please Note: Anything inside of the keyline will be printed and anything outside will not be printed.

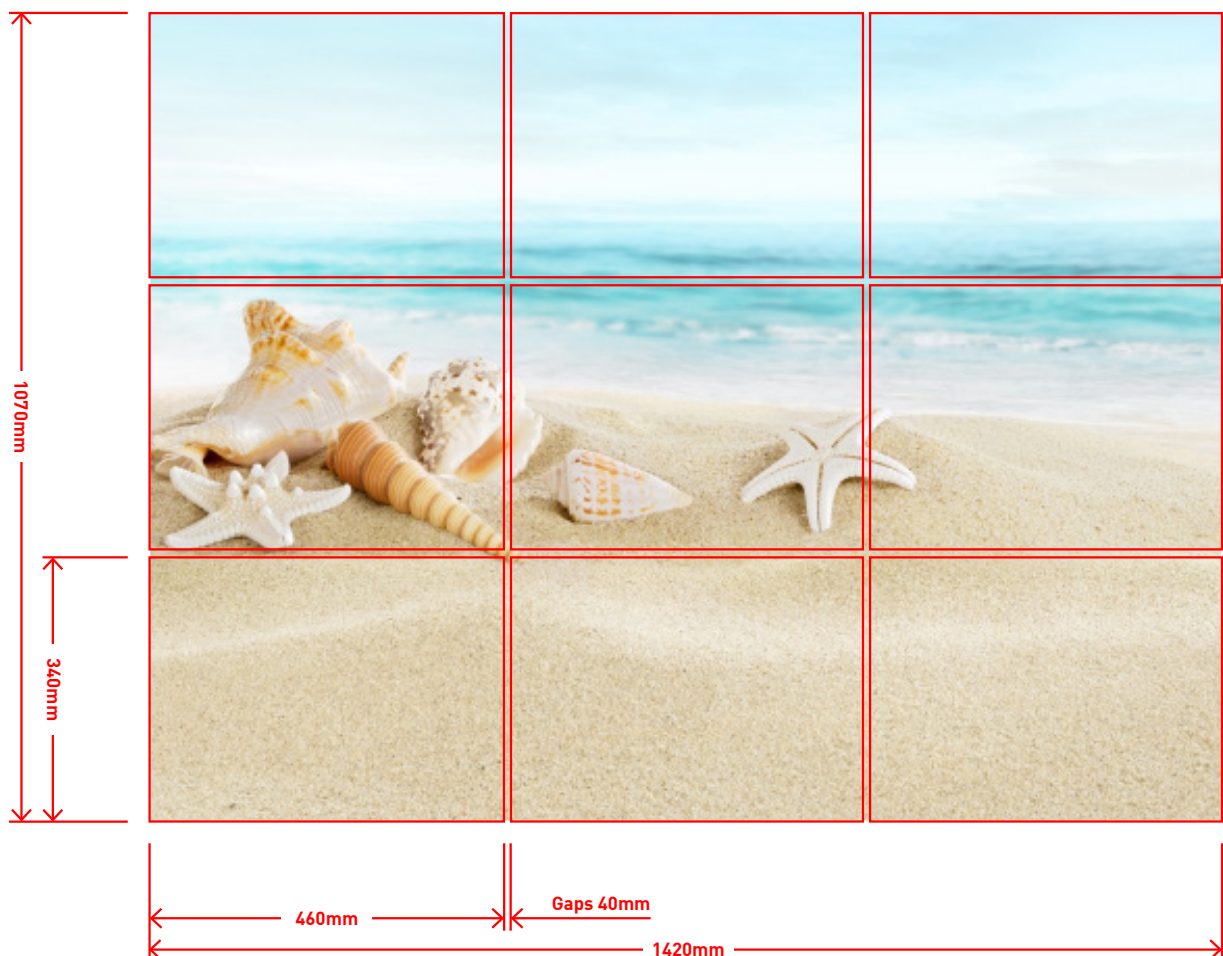


## Multi Panels

Tiling a design across multiple panels is easy with **VisionInk**. Our software can manipulate the image as required to allow for joins and frames etc. If required in the future, replacement panels with a perfect match in colour and positioning can be easily supplied.

### Multi Panel Layout Information

If your artwork is to be spread out over multiple panels of glass, then you will need to provide us with an accurate layout, detailing individual artwork placement, overall dimensions and panel splits relative to the placement of the complete piece of artwork. If the artwork is being assembled into a framing system and you don't want the artwork to be hidden within the framing, then we will need to be supplied the dimensions of the entire framing system. If you don't have this information, or if your artwork installation is being fitted to an existing structure, then **Glasshape** provides an additional On-site Digital Measuring Service to assist you with this.





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