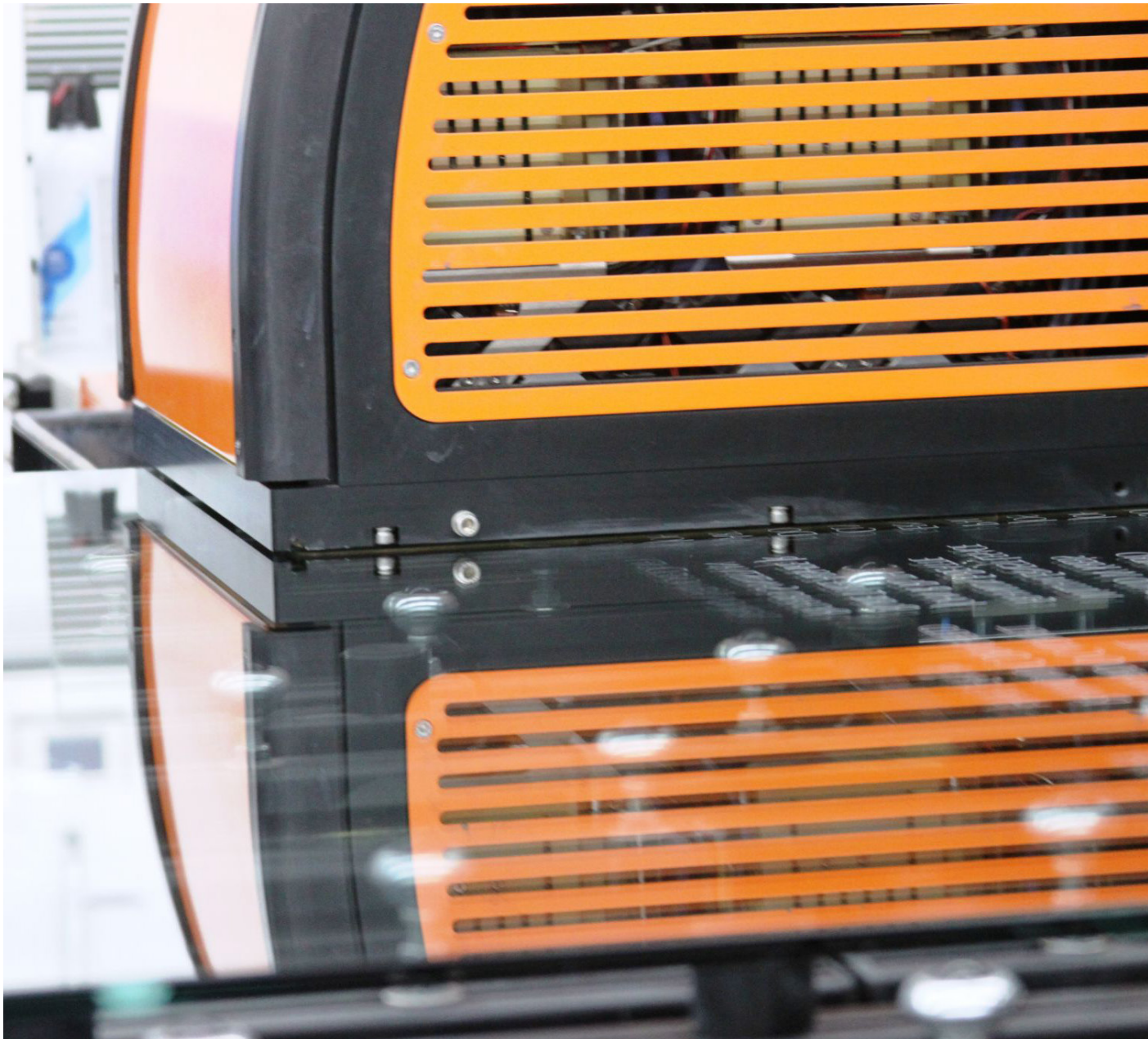# INTEGRAL SEAL'S
ARTIST & DESIGNERS
GUIDE TO GLASS PRINTING

COLOUR REPRODUCTION AND MATCHING

The ceramic ink process employed means that not only does the colour gamut differ from traditional printing methods, but achieving exact colour matches are a distinct challenge.

Traditional printers use a combination of the four spot colours known as CMYK to achieve a full range of colour. By contrast ceramic glass printing combines its own proprietary ceramic spot colours.

STANDARD   CERAMIC

| C | M | Y | K | | B | R | O | G | K | W |

Since ceramic inks do not have magenta, bright pinks and rich purples are impossible to reproduce. Additionally, while the ImagInk process does contain blue and yellow, these are slightly different tones to CMYK and some colour shifting generally occurs.

PHOTOGRAPHS, SCANNED OR RASTER ARTWORK

Pixel based images that employ magenta and turquoise hues will result in these hues shifting towards neighbouring hues to fit into the colour gamut of our printer.

PANTONE, DULUX, RAL, SPECIFIC COLOUR MATCHING

When specifiying colours, colour libraries should be referred to as guidelines only. Our ceramic inks work within a unique colour gamut, and we cannot guarantee the same accuracy in colour matching as traditional offset or digital printing.

Additionally the colour and thickness of the glass will affect the colours of the printed surface, as will any light sources.

TEXT AREAS

Text and graphics should be created in Adobe Illustrator or a similar vector based program, as this allows sharp edges and definition to be retained when printing.

Text positioned on clear glass should be no smaller than 12pt. Text positioned on coloured backgrounds should be no smaller than 14pt and set at a heavier font weight at small sizes to minimise bleeding of inks.
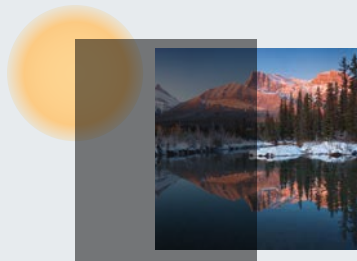
INK CHARACTERISTICS

The six spot colours used in printing all display a degree of translucency, while Blue and Green exhibit additional transparent characteristics.
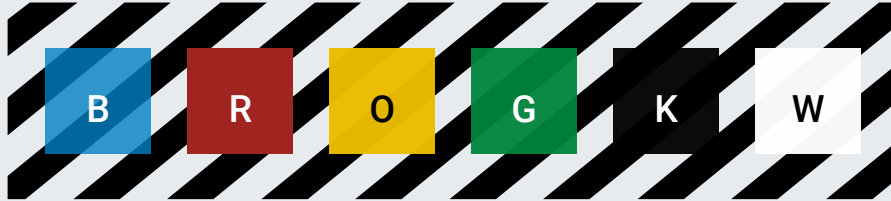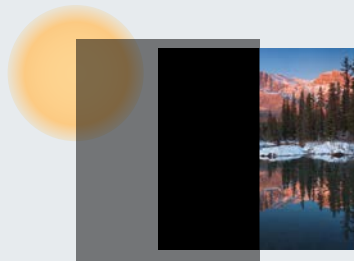

*Additional white can be combined with blue to even transparency.
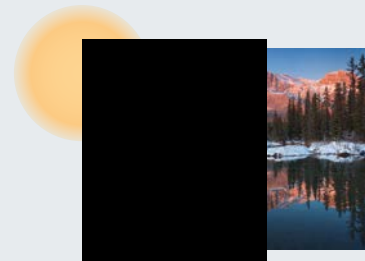
DEFINING TRANSPARENT, TRANSLUCENTS

Transparent

Allows light and vision through the image.

Translucent

Allows light though the image but no vision.

Opaque

Allows no light or vision through the image.

ACHIEVING TRANSPARENCY

Varying levels of transparency are achieved via the use of a dot or perforated screen that is applied over the artwork. Dot spacing can be as small as 1.5mm in diameter. This approach is only recommended for large format artworks that are viewed from a distance whereby the dots are not noticeable.

Original

Dots

Inverted

Unfortunately the ceramic inks do not facilitate varying levels of translucency. All ImagInk glass will have an amount translucency present as a result of the nature of the inks, this can be enhanced by backlighting to achieve illumination for light boxes.

CREATING ARTWORK FOR PRINTING

PHOTOGRAPHIC FILES

If creating your artwork digitally, call us to discuss resolution and image size before commencing any design development. Traditional artwork requires professional photography to ensure the most accurate colour reproduction.

Photographs should be supplied at the largest size possible, in RGB colour space. If working on a large scale project, please do not scale artwork to the finished size, as we will handle this in-house.

Saving For Print	
File Format	.Tiff .Jpeg .Psd .Png
Resolution	Between 120-300dpi
Colour Gamut	RBG

PHOTOGRAPHIC FILES

Vector graphics can require extensive work to set up. We recommend you discuss your project with us early in the creative process to check the feasibility of the reproduction and discuss the best methods to reproduce your artwork.

Keep your artwork neatly organised into layers for easy separation, as we often need adjust files to achieve the desired outcome.

We can supply an Adobe Illustrator file with a set of standard colour swatches, if required. We have a corresponding swatch panel in our showroom to give you a clear idea of our colour gamut.

Saving For Print	
File Format	.Dwg .Ai .Pdf .Eps
Text	Outlined or Font Provided
Colour Gamut	RGB

* Please note artwork submitted incorrectly may result in delays to production and delivery dates.

PANEL SIZE & GRAIN

ImagInk is a large format process, printing up to 1800x3500mm. A small amount of 'grain' is present in all printing, and is not noticeable when viewing from a distance.

POST FIRING

Once fired, the printed design and colours are visible from both sides. The ceramic inks have a matte finish on the printed surface. This surface can be installed exposed to create contrast against the reflective surface of the glass.

SAMPLES AND PROOFING

For complex prints a proof is made to demonstrate how the design will look, overall and on each panel of glass. Apporval of the proof is necessary for all prints where exact sized and divided artwork has not been provided to Integral Seal.

Producing a sample takes time and cannot be processed overnight. Complex projects may require multiple rounds of sampling to achieve the desired result. We encourage designers to factor this into their project timeline. If experimentation is required, allow ample time for testing from an early stage.

Samples are provided for all projects at a size of 300x300mm. We appreciate certain projects may require more than one sample, additional charges for samples are at the discretion of Integral Seal.

Sign Off Process

1   Physical sample supplied for sign off on colours, resolution and transparency

2   Digital proof emailed for sign off on scale and position of artwork on glass

* No print production will commence until a signed proof has been received.

If you require further assistance on any information covered in this guide, please don't hesitate to contact us.