

Contra Vision[®] *Impress*[™] Through Combination Method

Artwork for Contra Vision[®] *Impress*[™] Using Adobe[®] Illustrator[®]

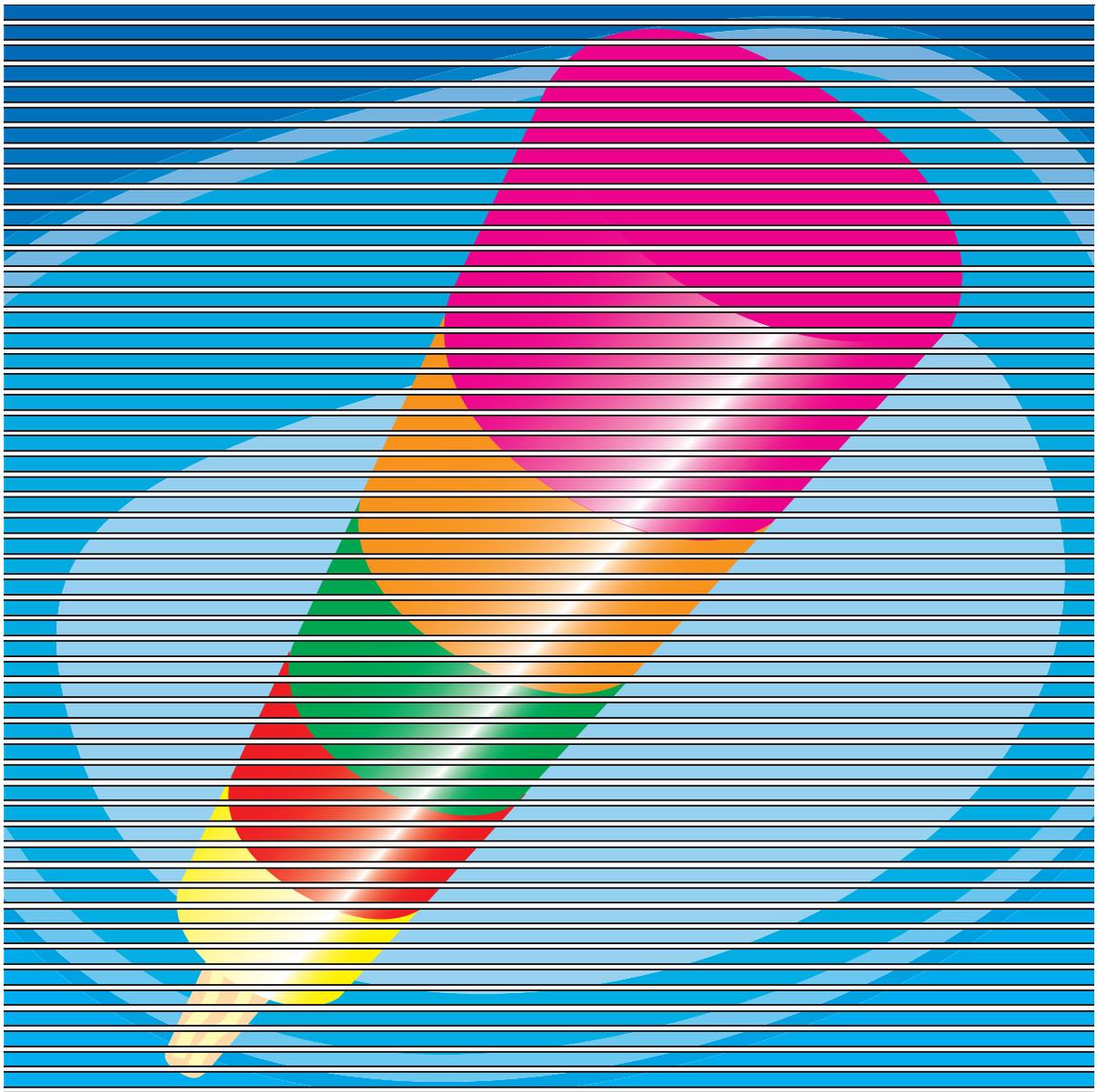


Image shows 2.4mm lines with 0.6mm gaps (transparent on finished product)

Contra Vision® Impress™ Through Combination Method

Understanding Line Disciplines

Creating artwork for Contra Vision® Impress™ is a quick and simple process. This brief guide will introduce you to the concept of Contra Vision® Impress™, explain to you how to understand line disciplines and demonstrate how to generate these line disciplines using Adobe® Illustrator®.

Contra Vision® Impress™ is a see-through graphics, one-way vision panel. A design layer (CMYK or spot colours) is superimposed on a white on black "silhouette pattern", typically on a transparent self-adhesive film.

Understanding Line Disciplines

In the accompanying detailed "know-how", you will find a number of different line disciplines to suit different products and product sizes.

For the purposes of this guide, we will work with line discipline TC/5, the technical details of which are:

- t = 0.075 mm
- C = 3.0 mm
- wb = 2.4 mm (80% opacity)
- ww = 1.8 mm (60% design impact)
- wd = 2.1 mm

Where:

- t = tolerance
- C = line centres
- wb = width black
- ww = width white
- wd = width design layer

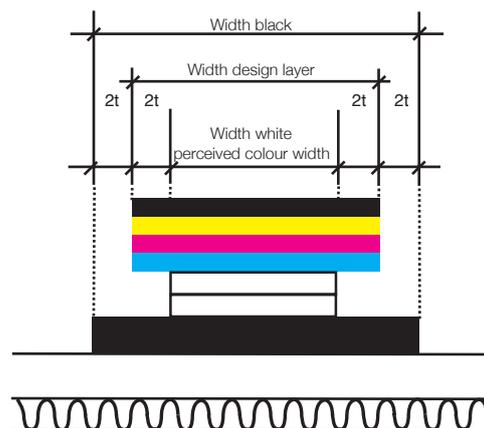
This guide describes the process for panels applied to the outside of a window. If you are applying the panel to the inside of a window the order of the print layers is reversed (eg, print the design layer first in reverse, then white, then black).

To produce a print using this line discipline you need to firstly print black lines at 2.4mm wide (wb), followed by white lines at 1.8 mm wide (ww).

A mask of 0.9mm white lines is placed in front of the design so that the design is printed in 2.1 mm lines (wd) onto the white lines. All lines are repeated at 3mm (C) line centres.

Note that the design overlaps the white but is less wide than the black. The design is only seen over the width of the white line.

Cross section of a single line showing the widths of each layer and how the design layer overlaps the white



On the finished panel the front shows the CMYK design. On the reverse we see only the layer of 2.4mm black lines as the design layer and white layer are hidden behind these black lines.



Front

Reverse

Contra Vision® Impress™ Through Combination Method

Creating Line Patterns for Contra Vision® Impress™ Using Adobe® Illustrator®

The following instructions show you how to make line patterns for the layer of 2.4mm black lines @ 3.0mm centres and the layer of 1.8mm white lines @ 3.0mm centres. You will also make a mask pattern of 0.9mm white lines @ 3.0mm centres.

These 0.9mm lines will be placed on top of the design layer to mask off some of the design. What is left will be the 2.1mm design layer lines @ 3.0mm centres that are required.

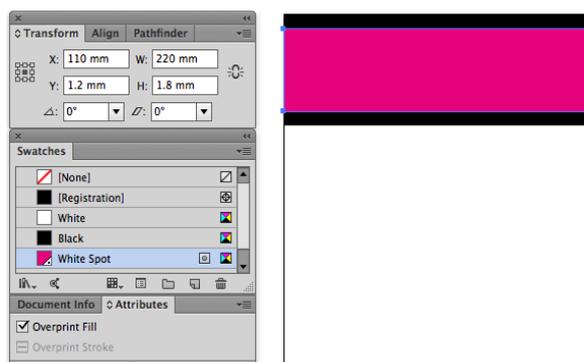
As Adobe® Illustrator® is vector-based, line patterns can be realised with a high level of accuracy. Line patterns are easily editable and repeatable.

Step by step guide

Firstly set your document to the finished bleed size at 100% scale. In this example we will be working with an A4 portrait file with 5mm bleed so our document needs to be 220mm wide x 307mm high. Create four layers in the document called: 'Black', 'White', 'Design' and 'Mask'

To draw the black line pattern ensure you are working in the 'Black' layer, then select the rectangle tool and draw a rectangle 220mm wide by 2.4mm high. Fill this rectangle with black then align this to the top left of the artboard.

Copy the rectangle to the pasteboard (Edit > Copy) and paste in front (Edit > Paste in Front) onto the 'White' layer. You will need to lock the 'Black' layer. Ensure that the reference point is set to the centre in the Transform palette then change the height of this rectangle to 1.8mm.



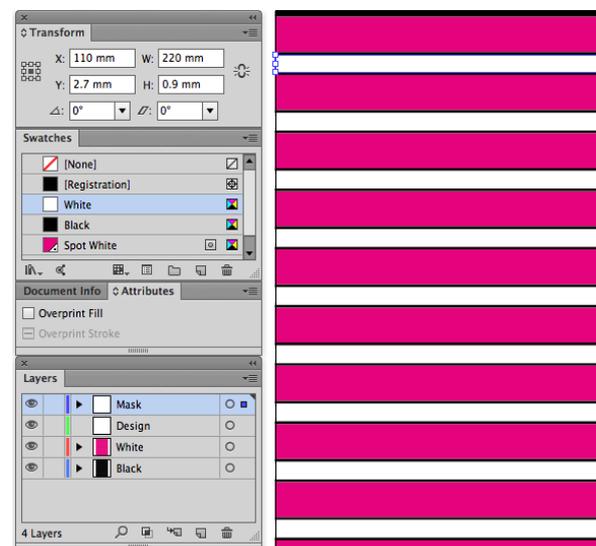
Fill this rectangle with a white spot colour (coloured magenta for illustration purposes in this example) and ensure Overprint Fill is ticked in the Attributes Palette.

Now copy the Black rectangle from the 'Black' layer again and paste in front onto the 'Mask' layer. Again ensure that the reference point is set to the centre in the Transform palette then change the height of this rectangle to 0.9mm. Colour this rectangle white. This rectangle needs to be moved down by 1.5mm (half of the 3.0mm centres) to ensure that the mask overlaps the gap between the back up lines equally.

Now you need to repeat this line pattern to fill the page. Unlock all layers, select all three rectangles and open Transform Effect (Effect > Distort & Transform > Transform).

Based on our A4 portrait artboard there are 102 duplicate copies that need to be made. If you are working on a larger scale document, ensure that the preview box is ticked. This will allow you to preview the lines and increase or decrease this number as necessary.

Once you have repeated the lines using the Transform Effect you need to expand the effect to create the lines as vector objects. To do this select all > Object > Expand Appearance. All objects will have retained the layer information so you now have a complete artboard full of your line discipline arranged into the correct layers.



Contra Vision[®] Impress[™] Through Combination Method

Creating Line Patterns for Contra Vision[®] Impress[™] Using Adobe[®] Illustrator[®]

Importing your artwork and outputting to your RIP

Once you have completed your line pattern you can place your artwork into the 'Design' layer. Align your artwork to the centre of the artboard and you can be sure that all of the elements of the line discipline will be aligned when printed.

You can now turn off the layers as required to suit your output process. For example: turn off the 'Design' and 'Mask' layers to output the black and white line pattern or turn off the 'Black' and 'White' layers to output your design layer with the mask in place.

Please note that within the nominated RIP software the spot white layer needs to be printed white - magenta is used for visual purposes only.

Using Template Line Discipline Artwork from the Contra Vision website.

In the Know-how section of the Contra Vision website you can download Template Line Discipline files that are pre-built using the method described above.

To use the files crop the supplied 2 metre x 5 metre (6' 6" x 16' 4") design template to the required size with the necessary bleed. Do not re size the document after cropping as this will distort the preset line disciplines.

The template as standard contains 9 layers (Mask, Design, White, White, Black, White, White, Design, Mask). Please delete layers where necessary, for example leaving only Mask, Design, White and Black (CVA1) depending on opacity of white ink.

Import the artwork into the Design layer of the document. If the file is an existing Adobe[®] Illustrator[®] document it can be opened separately and the content copied (Edit>Copy) and pasted (Edit>Paste) into the Design layer of the document. Alternatively the artwork may be placed depending on the file type (File>Place).