BRAND . MANUFACTURE . SUPPLY

Colour Management Guide
Since 1977, House of Flags has been a one stop shop for all our customers’ marketing solution needs. We have our own advanced digital printers, stock holding facilities and a dedicated installation team. This enables us to offer short lead times and higher quality products.

We know the importance of offering a wide range of materials and products as our customers have many different requirements. We have therefore invested heavily into expanding our material and product ranges.

Recently we have also released a new buying portal to streamline purchasing for customers.
Textile printing:
Textiles are printed both using digital print systems as well as screen printing on larger quantities. The digital print systems print using CMYK and screen printing will utilise either CMYK or Pantone/spot colours.

PVC and vinyl printing:
PVC and vinyls are printed using digital print systems which all print using CMYK.

Paper printing:
Paper is printed on either digital presses or Litho print equipment for larger quantities. Both methods utilise CMYK.
Our digital printers predominately use CMYK to create the design/image. 
In their simplest form they use a combination of cyan, magenta, yellow and black ink to create a wide range of colours. The image is broken down into dots of each ink and when printed the required image is created using a combination of the base colours. See below as an example to show the process.

The majority of our textiles are printed using a CMYK dye sublimation process
The inks are actually a dye and after printing are set into the polyester fabric using a heat process at approx 200°C. This system ensures the longest external lifespan of the image.
See the picture below of one of our printers in action.
For large volumes of textile we will often screen print the image. The inks used for screen printing are also dyes and require a heat process to set them into the polyester.

Screen printing of solid colours will require an ink to be prepared that will match a pantone colour reference and this is applied using a silk screen for each individual colour.

If a large volume of flags are to be screen printed and the image is predominately a full colour image (photographic type image) we will convert the image into CMYK and print using 4 screens (one each for CMY&K).

**Solvent Inks**

Our PVC and Vinyl's are printed using either solvent inks or UV cured inks.

Both systems utilise CMYK inks and there are benefits for each print system.
What changes colour?

1) Different substrates...

If the same colour (whether created as a solid colour or created using CMYK) is printed onto different substrates the material and reflection of the light will often mean that we see a shift in the colour and the different substrates do not exactly match.

This is even true when comparing a coated paper colour in a Pantone matching book with a the same colour but on uncoated paper. (Reference fig 1)

The light under which colour is viewed will also affect how colour is seen. We use “day light” lighting when viewing and matching colours.

What do House of Flags do?

To help minimise the colour shift of different substrates, we will try and identify colours for each printer and substrate. Giving us the closest match that we can achieve rather than just printing the same colour on each and every substrate.
Be aware that some Pantone references do not convert well from Pantone solid colours to Pantone CMYK colours.

Pantone 127 coated CMYK compared to 127 coated solid colours below shows a big shift in colour; some other colours will convert more accurately between Pantone CMYK and Pantone solid colours.
1: Varying artwork files
We receive artwork files and designs created in many different formats. Common software packages used are Illustrator, InDesign and Photoshop, all will handle colour slightly differently.

2: Different design files
We also receive designs using CMYK, RGB and pantone colours (both as a spot colour and tints of).

3: Converting an image
Converting an image to or from CMYK, RGB and Pantones will create shifts in colour and not all processes can achieve the same colours and have the same range of colours as the other processes. Our in house design team understands the different processes and methods of creating and managing colour and will always do their best to help match the coloured required. The studio will create the proof based upon how it will be printed.

To help control the final colour onto the different substrates we will take the file provided, look at how it is created and what colour references have been given (if any), look at what technology will be used to produce the finished product and then create a visual for client approval that takes into account all of the variables.

Sometimes for a supplied CMYK or RGB file we will convert the solid colours within the file to the nearest available matching Pantone and add this information to the artwork proof to help provide a reference point.
If you require further assistance with deciding on the right exhibition stand, our experts are on hand to help you choose.

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