INTRODUCTION

The following booklet is intended to assist in preparing digital artwork for submission.

They are guidelines to follow by and are not intended to be fail safe, but following the simple tips laid out below will help to minimise the risk of some common problems which occur when printing from digital files or querying artwork specifications for compliance with mailshots.
PRINTING DIGITAL IMAGES

Printing digital images can be daunting if you don’t have an understanding of print quality versus screen quality. A screen quality image, which looks fine on your monitor, will often look distorted or pixelated when you print it. This section explains how to ensure you get the best possible print result from your digital images, regardless of what computer program you are using to create your artwork.

QUICK TIP

Using software like Adobe Photoshop to increase the resolution of an image file from 72 dpi to 300 dpi will not work.

Unfortunately if your graphics are of low resolution, pixelated or distorted there is no way to increase the quality of the graphic or image.

Please ensure that your graphics or image files are set up at the correct resolution from the start.

TRY THIS!

To ensure maximum print quality we advise that all of your graphics should be a minimum of 300 dpi to print clearly.

For large format printing (e.g. posters) a minimum of 150 dpi is usually acceptable. Web graphics and screen grabs are usually only 72 dpi, which is screen quality and looks fine on a monitor, but not satisfactory when you print it out.

VECTOR VS RASTER IMAGES

There are two types of digital images:

VECTOR IMAGES AND RASTER IMAGES

Vector images are usually logos or line art graphics and can be enlarged or reduced in size without affecting the quality of the printed result.

However the most commonly used images, especially digital photographs, are raster images; which means that they are made up of a defined number of dots or pixels. This can also be defined by DPI or dots per inch. JPEG is the most common file format for a raster image.

The quality of this type of image when it is printed varies depending on the size it is printed out at.

EXAMPLE: If you have a picture file which has a resolution of 300 dpi or pixels – the amount of pixels will not change, irrespective of how much you enlarge or reduce the size of the picture on the document.

So if the picture was created at 800 pixels by 600 pixels, it’s resolution will be 300 dots per inch (dpi). However as a rule of thumb, this will be the maximum size you can make this particular picture.

If you start to increase the size of the image after it has been created, it will start to compromise it’s quality when it is printed. If you enlarge the picture to 1600 pixels by 1200 pixels high, its resolution will drop by half or in this instance to 150 dpi. This is because you have exactly the same number of pixels but spread over a bigger area. This will affect the output quality when you print it.
PORTABLE DOCUMENT FORMAT (PDF)

PDF is now the industry standard method for submitting artwork for printing because it generates smaller files and if used correctly, can ensure that all graphics and fonts are properly embedded so that they will print correctly no matter what computer you print them from.

1. Choose the right quality setting

Look for "print quality", "press quality" or "high quality" and 300 dpi resolution or more.

"Low quality" or "screen quality" or resolution between 72 dpi and 150 dpi will not usually process clear or good results and should be avoided.

2. Font embedding

If your print house’s computer doesn’t have the fonts you have used in your document installed, it will substitute them with something else - which can have unexpected and unwanted results. However, you can choose to embed all the fonts you have used in your PDF when you create it.

Alternatively making a note of the fonts used and relaying that information will help us to recreate your document if something unexpected happens.

Important Reminder

Please remember that if the document you’re printing contains low resolution graphics (e.g. screen grabs or web graphics) that are of low resolution/DPI, the resulting PDF will not necessarily be of print quality - converting the problem graphic/image to PDF won’t improve the quality of the graphics either.

An example of adverse affects of doubling image/poor resolution graphics when printed
Original high quality image (left) vs resized to be bigger or low quality image (right)

OTHER GRAPHICS FILE FORMATS

JPEG (.JPG), TIFF (.TIF) AND EPS (.EPS)

Many programs allow you to export your document as a graphics file, which, like PDF, will allow you to embed all the fonts and graphics in a single file. There are many different graphics file formats, the most common being JPEG (.jpg), TIFF (.tif) and EPS (.eps). However, saving your document in these formats should be approached with caution. A lot of programs will allow you to save your documents as JPEGs or TIFFs very easily, but do not give you much control to the image quality of the resulting graphics file.

In most cases, the resolution of the graphics file will default to 72 dpi - which is low quality, suitable for screen viewing but not for printing. This is a particular issue in MS Powerpoint and can cause big problems when MS Powerpoint is used to create artwork, particularly for posters. Please note if you are using MS Powerpoint to create artwork, set your document size to 4:3 ratio and not 16:9 (wide-screen) as this will cause further complications. Another difficulty with turning your documents into graphics files is that the resulting files tend to be huge (in terms of memory) and very difficult to handle - they might be too large to send by email. It is not recommended that graphics file formats other than PDF are used, except in conjunction with desktop publishing (DTP) software as appropriate.
BEST PRACTICES FOR SETTING ARTWORK BEFORE PRINT

**Colour Types**
There are several ways in which computers handle colour in picture files, the main two colour modes being RGB (red-green-blue) colour and CMYK (cyan-magenta-yellow-key black) colour.

RGB colour is based on properties of light and is suitable when images are to be viewed on screen, not for printing with ink or toner on paper. CMYK colour is based on properties of ink and should always be used when a colour image is to be printed. The colour mode of your graphics files can be set to CMYK from within your graphics program; the colour mode of your document text can be set from within your DTP program.

**Image Quality**
For high print quality any raster images you are using must be a minimum of 300 dpi at the size they are to be printed. An image which is 300 dpi at A6 (postcard) size will effectively drop to 150 dpi if you decide to fill an A4 page with it, so make sure the images you are using are of suitable quality for the size you want to print them. This will avoid any adverse affects to your document when it is printed out.

**Allowing for Bleed**
Allowing for bleed is often overlooked and can be important. A bleed is where an image or background colour is positioned so that it prints right to the edge of the page. If you’re working on a document that has bleed you need to make the object that bleeds off the page overlap the edge of the page by at least a minimum of 3mm (see diagram).

We currently set all of our bleeds to 5mm as a precaution. The printer prints the document on a larger sheet size than the document size, and then trims off the excess at the edges. The extra 3mm bleed leaves a bit of extra print to crop into, ensuring that the image does bleed off the page without leaving any visible white border.

CHOOSING THE RIGHT SIZE ENVELOPE

Choosing the right envelope for your mailing can be difficult so here is our guideline to help you understand what you need to know and the options available. Most envelope sizes are now based on metric A’ size paper sizes, for example A4 and when folded, A5 and A6. There are envelopes available for imperial sizes or larger than regular stationery sizes.

Here are a variety of different envelope types and what category of content most commonly goes into each, ranging from letter to large letter categories. For example: C6 envelopes are widely used for invoices or statements, whereas a C4 may be used for a thin catalogue or business quotes.
COLOUR & OVERPRINTING

Overprinting is a great way to print an image or a logo onto an envelope – this is a great way to add extra marketing oomph to your direct mail campaign and is very cost effective too! Envelopes do not have be boring by design or colour! Make a great first impression with your end client.

For example:

Blue is used by a lot of banks and corporate companies because of its trustworthy qualities. It also says a lot about cleanliness and coolness.

Green is also a very natural colour but also suggests health and freshness. Often used by charities and more commonly by organic food companies to promote the fact they are environmentally friendly.

Any colour other than white is guaranteed to make your envelope stand out but with the onset of overprinting onto envelopes, we now have the capability to print any design or photo on your envelope to appeal directly to your customers with a great first impression!

Using your company’s colours is a safe bet, as it will create a sense of consistency throughout your campaign. However, for those of you who want to really stand out, why not choose a colour that provokes an emotion?

Try a colour envelope or coloured branding that works for your business to create a great first impression.