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www.greenbarnes.co.uk

Artwork Guide

Artwork Overview

We are committed to ensuring that our products meet the highest standards and pride ourselves on paying attention to detail. Artwork is no exception but in order to output the best results it is essential that any source material that you provide to us is of the highest possible quality in the first place. In order to assist you in providing us with the best possible results, we have written a short guide to assist you when preparing your artwork to send to use.

Vectors vs Bitmaps

To ensure the highest quality artwork, where possible, should be in **Vector format**. This is most easily understood if we consider lettering. To the right are examples representing text in both bitmap and vector format, which illustrate the difference. Vector format graphics provide the smoothest, sharpest images for areas of flat colour such as lettering or logos. Please note that this is not the case for photographic images which, by their very nature, contain areas of graduated colour and are bitmaps.

Is My Artwork In Vector Format?

If your file name ends in .ai, .pdf, .eps and .svg. then it is likely that your artwork is in vector format but there are a couple of things to check, as it is not guaranteed. One way to assess your artwork would be to open it in Adobe Illustrator or Corel Draw. If you select the artwork with a selection tool you should see some nodes appear in a kind of dot-to-dot style. This means that the artwork was created with a vector program and contains vector graphics. However, if your artwork cannot be selected in this way, it is likely to be a bitmap that was dropped into a vector-based program.
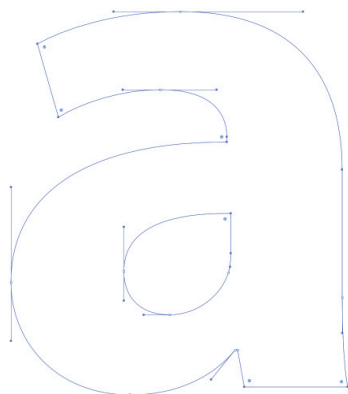
If your artwork was designed in a non-standard design program such as Microsoft Word or similar then it might be possible to export it in vector format, but it might be better to recreate it in a design program.

Screen vs Print

Probably the single most common source of frustration when originating artwork arises from a lack of understanding of the conflicting requirements of images intended for use on-screen and in print. Images and logos found on web pages are usually low quality images of 72 dots-per-inch (dpi). Whilst these are entirely adequate for display on-screen, and are deliberately kept as small as possible to maximise the speed of loading, this resolution is insufficient to produce acceptable results when printed. For quality printing of, for example, photographic images, 300dpi is considered to be the acceptable norm and hence in the vast majority of cases, files lifted from websites will not produce satisfactory results. It is therefore always worth seeking out and supplying us with the best quality, original artwork that you can. Ultimately, if high-resolution artwork is not available, we may be able to recreate it from a low-res file but this is chargeable at an hourly rate and, depending upon the complexity, can be time-consuming. If in doubt, please contact us on **01280 701093** for further advice.
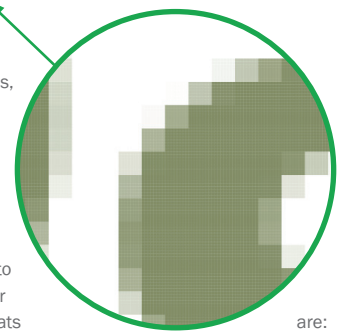
Guidelines

Here are a few guidelines to assist you in finalising artwork:

• Create your artwork in a vector based program such as Adobe Illustrator or Corel Draw
• Ensure all text is converted to outlines. This prevents errors from occuring when we do not have the original font that you used to create the artwork.
• Save in Illustrator (.ai), Portable Document Format (.pdf), Encapsulated Postscript (.eps) or Corel Draw (.cdr) format.

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Bitmaps

Bitmaps, sometimes also known as raster images, are made up of thousands or even millions of pixels (megapixels). They are best suited to photographic images where there is often a constant change in tone from one pixel to the next across an entire photograph. However, the main limitation of bitmaps is that the individual pixels become more prominent as the viewer zooms into the image. Therefore, it is best to use bitmaps for photographic images only. Example bitmap formats are:

JPEG	Bitmap file format, typically used for photography
PSD	Bitmap artwork file created with Adobe Photoshop (can contain multiple layers)
GIF	Bitmap used to create compressed website graphics with minimal colours
PNG	Bitmap to create small website graphics, though more flexible than GIF

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Vectors

Vector artwork is based upon the principle of using mathematically calculated lines that form shapes using control points, essentially, a form of mathematical dot-to-dot. As the viewer zooms into the artwork, the lines do not visually become blurred as there are no pixels within the image, just crisp line art. The disadvantage with vectors is that they cannot be used to represent photographic images - they work best with areas of colour or specific gradients. Examples formats that use vectors:
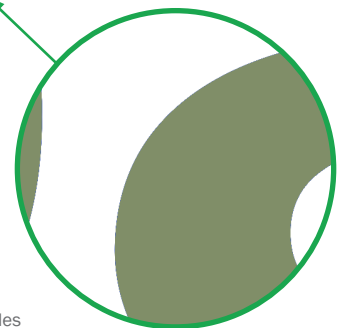
AI	Vector file format created with Adobe Illustrator
PDF	Capable of containing both vector and bitmap images in the same file
EPS	Capable of containing both vector and bitmap images in the same file
CDR	Vector format created with Corel Draw

No Vector Format Available?

We can assist you in creating your artwork but this will incur an additional charge. Please contact Greenbarnes on 01280 701093 for more details.

FINGERPOST

INFORMATION PANEL

INTERPRETATION PANEL

SIGN

Before You Begin

It may seem obvious, but the first question to ask yourself before embarking on any sign project is, "What is the end result that I'm seeking to achieve?" Signs, information panels and interpretative panels have much in common but there are subtle differences in purpose and therefore in the process of creating them. Signs are used to announce things; a church sign for example announces the presence of and identifies the church whilst a similarly-sited information panel would perhaps give more detailed information such as service times and contact details. In contrast, interpretive panels should use an imaginative combination of text and visuals to tell a story about an object or a place.

Planning

Below is a check-list of the stages required to design, produce and install signs, information panels and interprative panels. Not every project will require all stages and, depending on the project in hand, the amount of work required at each stage may vary considerably, but working logically through the list will provide structure to the process and considerably enhance the chances of a successful outcome.

1. Research and plan the sign's contents
2. Assess the site to locate exactly where it will be installed
3. Source graphic files and/or commission illustrations where necessary
4. Write the draft text
5. Initial layout and design
6. Proof initial design
7. Final layout and design
8. Final proofing
9. Manufacture
10. Installation
11. Evaluation
12. Maintenance

Producing Effective Signs

Keep it simple. The best signs are often the simplest. When designing interpretative panels, a single panel should communicate one or two main messages. Panels that try to do too much will be ignored. As a guide, you should aim for a maximum of 200 words per panel, and a simple and attractive design.

Layering The Message

Your message should be layered so that it is accessible to everyone. Again, mainly relevant to interpretation panels, research shows that people look at adverts (and panels) in the following order:

• The headline
• The main picture
• Sub headings
• Bullet points
• Further illustrations
• The main text

Therefore, to get your message across to everyone it must be communicated by the headline, the main picture, and any sub-headings. The main text can contain all the necessary detail. The panel must look attractive and be accessible at a glance. Many people will decide in seconds whether they will read it. These few seconds are vital: provoke and stimulate their interest, and you've got them! You should use a text hierarchy of different type sizes, with the more important text in larger type. See the size guidelines to the right of this text.

Lettering Height

The optimum viewing distance for signs depends mainly on the size of the font used and also the type of font style, the colour of the letters and the location of the sign. An advertising sign being viewed from passing traffic in varying light conditions would need to be bigger than an information sign on a door for example. The chart below gives a rough estimate to optimum lettering sizes and various distances. An easy way to check is to print a letter on your desktop printer, stick it on a wall and walk away to get a sense of how visible it is.

Letter Height		Optimum	Max Distance	Optimum (m)	Max Distance
inches	mm	feet	feet	metres	metres
3"	75	30'	100'	9	30
4"	100	40'	150'	12	46
6"	150	60'	200'	18	61
8"	200	80'	250'	24	76
9"	225	90'	400'	28	122
10"	250	100'	450'	30	137
12"	300	120'	525'	37	160
15"	380	150'	630'	46	192
18"	457	180'	750'	55	229
24"	610	240'	1000'	73	305
30"	762	300'	1250'	92	381
36"	915	360'	1500'	110	457
42"	1067	420'	1750'	128	534
48"	1220	480'	2000'	146	610
54"	1372	540'	2250'	165	683
60"	1525	600'	2500'	183	762

Additional Guidelines on Text

Your text will also be improved if you:

- Write in a lively and conversational style
- Write in short sentences and paragraphs
- Avoid jargon and technical terms

Relate to your audience by:

- Addressing the reader in the first person (i.e. by referring to them as 'you')
- Use active rather than passive verbs
  (e.g. 'we manage...' is far better than 'this site is managed by...')
- Use metaphors, analogies and comparisons
- Use humour, poetry and prose

How To Use Visuals

Good visuals can make all the difference between a good and bad interpretive panel. Visuals could be photographs, drawings or illustrations, and have important roles in communicating with your audience:

- They should illustrate something the visitor can't already see for themselves
- Drawings are often better at illustrating something than photos
- All illustrations should have a clear relationship with the text
- All illustrations should be clearly labelled or annotated
- Allow sufficient time and money to research and source the visuals, commission drawings if necessary, and pay any copyright fees

Maps

If a map is needed on a sign or interpretive panel it must be clear and easily understood. Some points to consider are:

- Make sure you have copyright clearance for the map
- Only include information that is really necessary
- Make sure the map is large enough for its situation
- Make sure the design is clear and easily understood
- Consider using an oblique '3-D' map if possible

Many people find hand drawn maps easier to understand than the usual Ordnance Survey format, especially if key features are illustrated in perspective.

Layout and Design

Good layout and design will unite the text and visuals, and will ultimately dictate how well your message is put across. Your designer will make skilled decisions regarding:

- The graphic images and illustration style
- Graphic devices to add interest
- Typeface, typesize and spacing
- Colours
- The practicalities of the reproduction method to suit graphics, and materials

Always involve your designer at the earliest stage and provide them with all relevant information about your sign or panel such as why, who for, the site layout etc. You should also identify at an early stage what will best enhance the on-site experience. This may determine the materials used and the method of fabrication, which in turn can influence the kind of graphics you may or may not be able to use.

LECTERN-MOUNTED INTERPRETATION PANEL

POST-MOUNTED INTERPRETATION PANEL

Contact Greenbarnes now on 01280 701093, visit our website at www.greenbarnes.co.uk or email sales@greenbarnes.co.uk

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Proofing The Design

Careful proofing is very important. When you receive the proof for your panel, consider:

- Does it grab your attention?
- Is the layout logical and easy to follow?
- Is the text accurate and the spelling, grammar and syntax correct? (the text you gave the designer may have been correct, but mistakes do arise when the text is laid out)
- Show the proof to someone who does not know the subject to see whether your message is coming across loud and clear.

Changes arising from checking of the first proof are included in the price quoted for production. However, further changes may incur additional charges, hence the importance of proper research and planning at the outset. Only when you are happy with the design and have signed it off, can the production process begin.

Panel Materials & Production

A number of techniques are available depending on your content, design preferences and budget.

Simple signs comprising only text are usually created using computer-cut vinyl lettering which is cut from vinyl sheet material of the chosen colour by a plotter and then applied to the sign substrate. This method is similar to that used for applying vehicle liveries and whilst weather-proof and permanent, does have the advantage of possibly permitting limited alterations (e.g. changes to telephone numbers, service times etc.) should this prove necessary at a later date.

Simple, single-coloured logos can also be cut and applied using the same technique, whilst full-colour logos can be printed onto white vinyl and similarly applied.

For more complex artwork (typically for interpetation panels but also for some signs) which includes elements such as photographs with areas of graduated colour, the entire sign area must be produced as a single digital print which is then applied to the sign substrate. **Digital printing** is a flexible process that can reproduce full colour graphics such as colour photographs and drawings however as with all things there are pros and cons, so whilst allowing much greater freedom of design and content, the subsequent minor changes possible with cut vinyl lettering will not be possible on a digitally printed sign.

Further considerations include the anticipated lifespan of the sign and the degree of abuse that it is likely to suffer, due to both the efforts of nature and human interventions. All printing processes use inks that bleach in direct sunlight, so whilst durability continues to improve, the original colours will not last forever without some degradation.

Whilst computer-cut vinyl lettering applied to, say a powder-coated aluminium surface, will remain ledgible pretty much indefinitely, a digital print applied to the same substrate will have an expected lifespan of approximately 5 years before appreciable fading may become apparent. This does not mean that the content will become illegible but simply that depending upon the site conditions, some fading may be appreciable. Being a thin film applied to the surface of the sign substrate, digital print is also vunerable to abrasion and potential vandalism.

GRP (gless reinforced plastics) encapsulation, a technique frequently employed in the production of interpretative panels, offers improved performance both in terms of fading and vandal-resistance. Designs are printed onto paper which is then embedded in the GRP, a strong and long-lasting material which provides both a physical barrier against abrasion and also a barrier which reduces the effects of UV light on the inks used.

DIGITAL PRINT

GRP ENCAPSULATION

COMPUTER CUT VINYL LETTERING

Artwork Guide

Installation

It is vital that signs are installed in the right place and facing the right way.

- Orientate interpretation panels so the viewer can relate it to what they are looking at.
- If possible, try not to install interpretation panels facing due south as UV bleaching from sunlight can reduce the life of a printed panel significantly.
- Ensure you have a suitable hard standing or ground surface for people reading the information and interpretation panels.
- Remember that if installation is to be carried out on a public highway, installation will need to carried out by a suitably qualified and certified contractor and that it may be necessary to seek permissions from utility companies in addition to meeting the usual planning constraints. If in doubt, consult the relevant local authority.

Mountings

Here is a list of possible mounting options for signs, information and interpretation panels:

- As part of a multi-bay noticeboard
- Man-made Timber or metal lecterns
- Oak, Man-made Timber or metal posts
- Existing stone, brick or concrete plinths
- Existing walls or railings

Lectern and plinth mounted panels should be at about waist height and inclined at an angle. The panel should be fixed between waist and shoulder height, although this could be lowered to cater for children.

Maintenance

Finally, once installed, to prolong the life of and derive the maximum benefit from your sign or information panel, make sure it is properly maintained by keeping its surfaces clean, tightening all fittings and cutting any encroaching vegetation etc.

LECTURN MOUNTED

POST MOUNTED

RAILING MOUNTED

WALL MOUNTED