

adgraphix File preparation.

A perfect finish

To get the best finish, you need to make the best start. We recommend artwork for large format digital print and signage be set up in Adobe Illustrator where possible. Keep your artwork tidy, the more complex the elements you make, the more opportunity for issues there is. Delete unwanted elements, check your layers, link placement and most importantly that you have the right resolution and colour setting applied. Always supply a screenshot or jpg of the finished design along with your file.

Compatibility

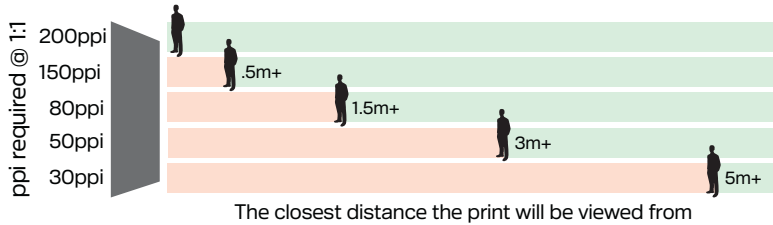
Adobe Illustrator .ai
Adobe InDesign .indd
Adobe Photoshop .psd
Adobe Acrobat .pdf
EPS, SVG (vector only)
TIFF, JPG, PNG

Resolution, settings and setup tips.

Resolution

Raster content (psd, tiff, jpg etc)... Image files/links should be set up to a resolution of 80-150ppi for most applications. Images with very high quality to start with, use 150ppi - 200ppi. Use 200ppi to 300ppi if the design has very fine text/elements as non vector content for very close viewing.

Use the chart below to calculate the px/in (ppi) your image needs at final size based on the viewing distance the print will be seen from.



Effects resolution - Adobe Illustrator

Effects such as drop shadows require a user designated ppi. You will find this in the Effects menu > Document Raster Effects Settings.

If working at a scaled percentage, you will need to set the ppi to allow for the sizing up of your design to print.

Example: A mural designed at 10% requiring a resolution to be 100ppi so at 10% size it will need to be 1000ppi. Left at default 300, it will be 30dpi (pixelated).

On screen proofing tip

Zoom in and match your screen rulers to a physical ruler or item such as A4 paper (210mm). This will give you an idea of any potential pixelation or quality loss from over-enlargement.

Text height legibility at distance

Max viewing distance - metres	5	10	15	20	25	30	40	50	60	100
Just readable - mm	9	18	27	36	45	55	73	90	110	180
Comfortably readable - mm	17	33	50	67	83	100	130	167	200	335

Use this chart to work out what size your cap height needs to be so your sign can be read from the intended viewing distance.

Superwide stuff

Illustrator is best for superwide as it supports large sized artboards. It also allows you to place a single link over several artboards which is ideal for customised tiling requirements. Note: If working to scale, the image resolutions you need are still based on viewing distance. You will need to factor the enlargement. Raster effects default to 36dpi on oversized artboards. Adjust this accordingly where required.

When working at scale

Work at 10% - that makes the maths easy. See example:

Design stats @ 10%		Printed result
Page size: 2000mm x 300mm	X 10	Print size: 20m x 3m
Bleed 2mm		Bleed 20mm
Link res 800ppi		Link res 80ppi

Crop and size raster links in Photoshop so you can optimise the pixel data with Photoshop interpolation settings etc. In Illustrator you can check your links final resolution in the links tab.

Billboard file setup

Only set up at 100% or 10% of actual size. Do not add crop marks to your file.

100% Finished size
 Artboard 6000mm x 3000mm
 Bleed 50mm
 Raster/bitmap resolution: 30ppi

10% Finished size
 Artboard 600mm x 300mm
 Bleed 5mm
 Raster/bitmap resolution: 300ppi

See page 2 & 3 for information on the following:

COLOUR

CUTLINES

BLEEDS

SAVING TIPS

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Keylines for cutting

These are vector objects that will be used to cut a custom shape instead of the page borders.

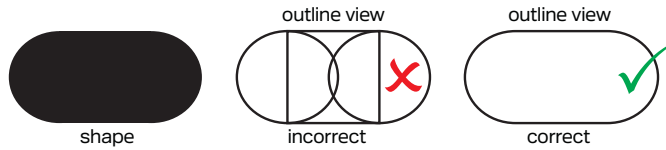
Cut coloured vinyl objects should be clean vectors and coloured as the intended colour. White jobs can be coloured K or M.

For print jobs, label all keyline objects as a spot colour (100%M) called CUT and put them on a separate layer. Get advice for bleed settings.

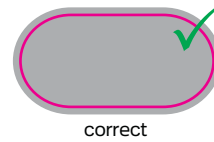
We require a single smooth vector path of the shape. Turn on wireframe view to check your lines are single line segment of the desired shape and not a group of overlapping objects.

Constructing a shape for cutting

Coloured vinyl, router or laser cut



Print and cut



How much bleed?

Direct & face mounted prints	10mm	Wall murals	20mm
Fabric	40mm	Mesh	50mm

Colour - best practices.

Colour settings

Ensure colour settings between applications are the same. The chosen colour profile dictates how your file is displayed.

Colour Modes

CMYK 	PRO's	Predictable, consistent, reliable.
	CON's	Can restrict you from utilising the entire gamut of our printer.
RGB 	PRO's	Wider gamut than CMYK (in general).
	CON's	Out-of-gamut colour will change. Some drastically if they're super saturated.
PANTONE 	PRO's	Consistent when using Pantone inks.
	CON's	Inconsistent for digital production. Out-of-gamut colour will change.

Colour Profile

A colour (ICC) profile holds the data and settings that define all achievable colours (gamut) for the given profile. Without the colour profile, there is no way to know what your chosen formulation should look like. Profiles help to keep colours consistent across different devices including displays and printers.

This example shows the exact same blue and what it correctly looks like for a given colour profile. If you do not specify (embed) what colour profile you used, you could potentially get a blue, but not necessarily the expected one.



Rich blacks and black gradients

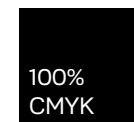
Did you know that black in the US Web Coated SWOP V2 profile is more of a dark grey? Have you had printing done where your blacks were printed dark grey? Most likely the printing company had a colour management system which saw it as dark grey, not your intended black.

We assume that 100%K means you are actually intending to get a rich black printed. We assume your preferences are set to display all blacks as rich blacks, which in the case of US Coated, means displayed inaccurately. We fix them so they print rich black like you intended.

If you make a gradient with a colour to black, it's best practice not to use 100% K for black.



Top Tip



To ensure a dense black, set up your black design elements as:
C 100
M 100
Y 100
K 100

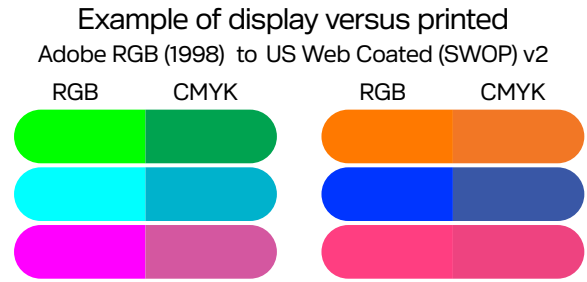
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Colour accuracy

Some digital displays have a limited gamut size and cannot display some printable colours accurately. Likewise, digital displays can display colours that cannot be printed.

RGB colours and saturated Pantones.

If your file is RGB and using saturated colours generated for digital displays (or vivid ink from the Pantone system), there's a good chance the colours will be mapped to a printable version. See examples...

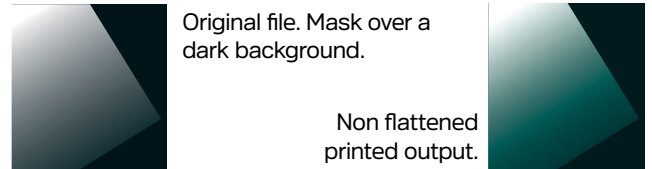


Even with the best colour matching practices, there are so many variables that make it near impossible to guarantee exact printed matches for every desired colour on any given day.

Best practices and saving.

Opacity masks

We recommend you do not use them. Opacity masks using gradients can lead to very undesirable results. The flatten transparency command prior to saving the file eliminates potential colour casts and gradient blend shifts.



This is not a printing error, but a consequence of the feature.

Tips for problem free production

- Match colour management settings across apps.
- Embed colour profiles on links and document.
- Check doc raster effect resolution settings.
- Use native formats for links such as .ai and .psd.
- Convert all fonts to outlines / curves.
- Avoid using transparency effects over spot colours.
- Turn OFF all printer marks etc when saving.
- Delete objects not intended to print.
- Double check image resolutions are adequate.
- Check placed objects are aligned correctly.
- Triple check your spelling and punctuation.

More information

Image resolution blog

<https://www.adgraphix.co.nz/blog/pixels-at-a-distance/>

Colour management and matching blog

<https://www.adgraphix.co.nz/blog/colour-part-1-the-basics/>

Pantone swatches and matching blog

<https://www.adgraphix.co.nz/blog/pantone-without-pantone/>

Vertical text - run it up or down? blog

<https://www.adgraphix.co.nz/blog/text-on-the-vertical/>

Vehicle windows coverage rules blog

<https://www.adgraphix.co.nz/blog/to-cover-or-not/>

Save like this



.ai

- Create pdf compatible file
- Include linked files with your ai file
- Embed ICC Profiles



.ind

- We've prefer packaged InDesign files



.pdf

- Adobe PDF Preset: [Illustrator Default]
- Output Profile Policy [Include all profiles]
- Preserve Illustrator editing capabilities.

- Save the print dimensions in the file name.
- Include a low res jpg or a screenshot with your file.

Embedding images in editable PDF's

You must embed all of your linked images before you save to PDF from Illustrator. When you save a PDF file out of Illustrator with 'preserve Illustrator editing capabilities' selected, in a way two copies of the file are saved within the one file. Your links will not be embedded in the Illustrator compatible portion if they were not already embedded before you hit save. When we open it, we will only see low res placeholders.