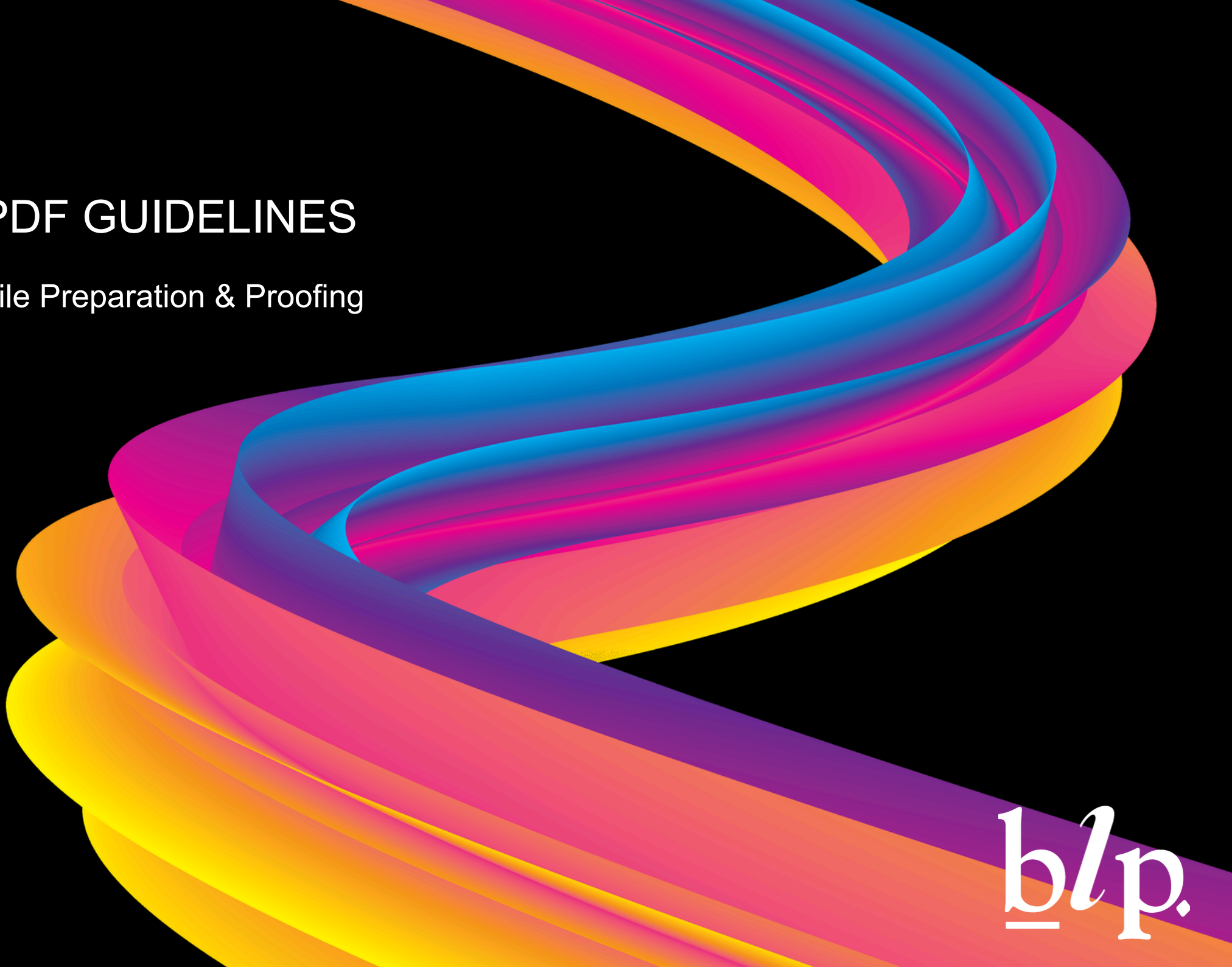
PDF GUIDELINES

File Preparation & Proofing



Contents

Preparing Your Artwork for Print

Our aim is to ensure you're delighted with the finished publication. This guide has been created to help you prepare your artwork correctly and achieve the best possible results from your print.

With high volumes of artwork passing through our production environment every year, it's important that files arrive with all elements correctly prepared and supplied to specification. To ensure your job progresses smoothly and achieves the best possible print result, responsibility for the accuracy and suitability of supplied artwork remains with the customer.

To support you in this process, we provide access to powerful pre-flight technology designed to identify potential issues within your PDF files before they reach production. Our pre-flight system allows artwork to be checked against key technical requirements, helping to highlight problems that could affect print quality, finishing or production.

We strongly recommend that all print-ready PDFs are submitted through our pre-flight process wherever possible. This gives you an additional opportunity to identify and resolve any technical issues before production begins.
Our production and account teams are also on hand to help. If you're unsure about our artwork specifications, file requirements or the submission process, please speak to your account contact. We're always happy to provide guidance and help ensure your files are ready for print.

PDF’s - File Preparation Checklist

To ensure your artwork is print-ready, all PDF files supplied to us should meet the following requirements:

File Format	PDF 1.4
Colour Profile	RGB: sRGB IEC61966-2.1 CMYK: ISO Coated v2 300% (ECI)CMYK
Page Supply	single page PDF - no spreads
Fonts	- all fonts need to be embedded (100% subset); - type 3 fonts are unpredictable so we are unable to accept these
Folios / Content	must be no closer than 5mm inside trim area to allow for variation during the manufacturing process
Colour Space	CMYK not RGB; if left as RGB the system will convert to CMYK
Image Resolution	300dpi (minimum 150dpi)

Crop Marks (Optional)	if included, crop marks to start 3mm from trim (outside bleed)
Trim Box	set to the finished trim size of the publication
Bleed (Required)	3mm bleed on all edges
Colour Coverage	colour must be no more than 300% total coverage
Minimum Coverage	combined ink coverage must not be less than 5% as this may not print
Naming Convention	- should not include any accents or symbols - should be consistent, eg: title_issue_P000.pdf, where P is the 3 character page number, e.g. page 12 should be described as: P012

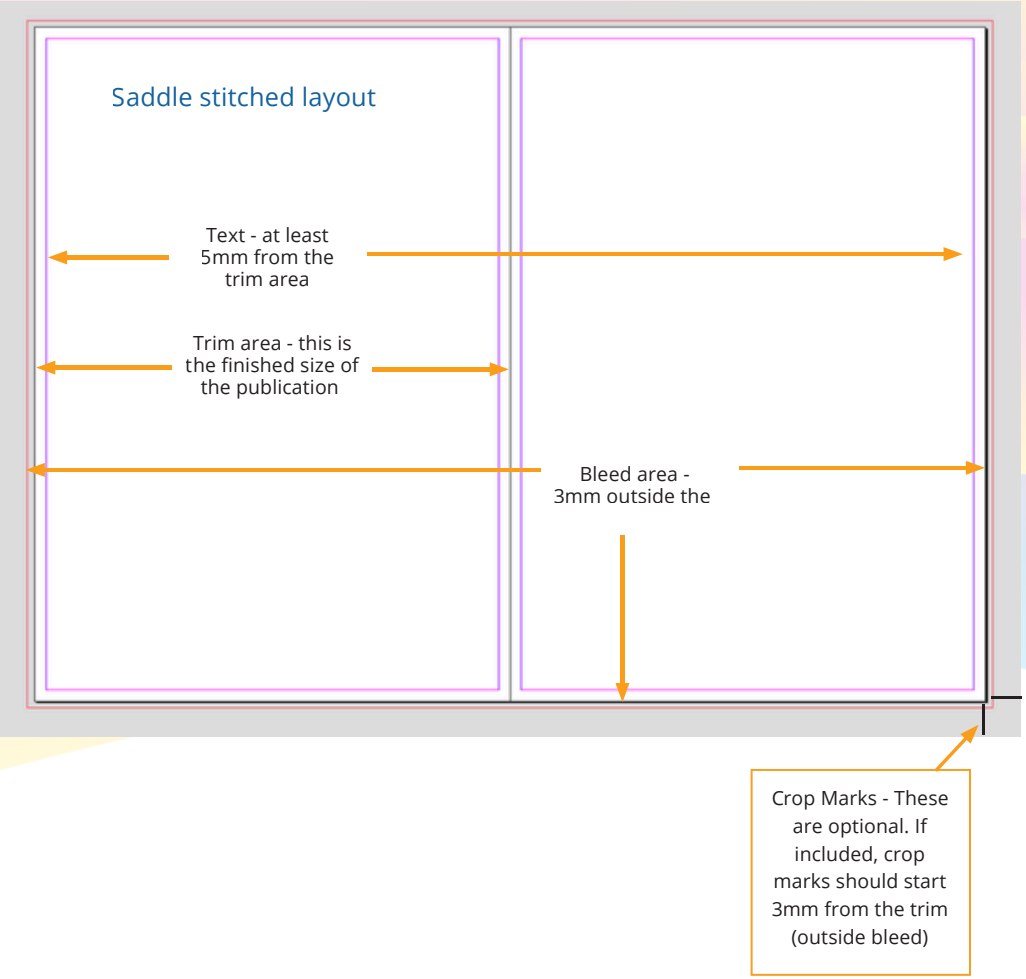
Continued ...

Additionally, if your publication is being finished with either perfect or PUR binding, please supply as follows:

Spine Size	to be supplied by your Account Manager or Client Services
Spine Supply	to be supplied as a separate single page PDF
Double Page Spread	- If within the first or last 9 pages, a design spreads over two pages, the left hand image must be moved 7mm to the left and the right hand image 7mm to the right to allow for spine milling and cover hinge. - For all other instances, the pages need to be moved out by 4mm. - Each page is to be supplied as a single page PDF
Body Text	all main body text should be no closer than 15mm inside the trim of the binding edge and 5mm inside the trim on all other sides

Page Layout

Saddle Stitched Publications:



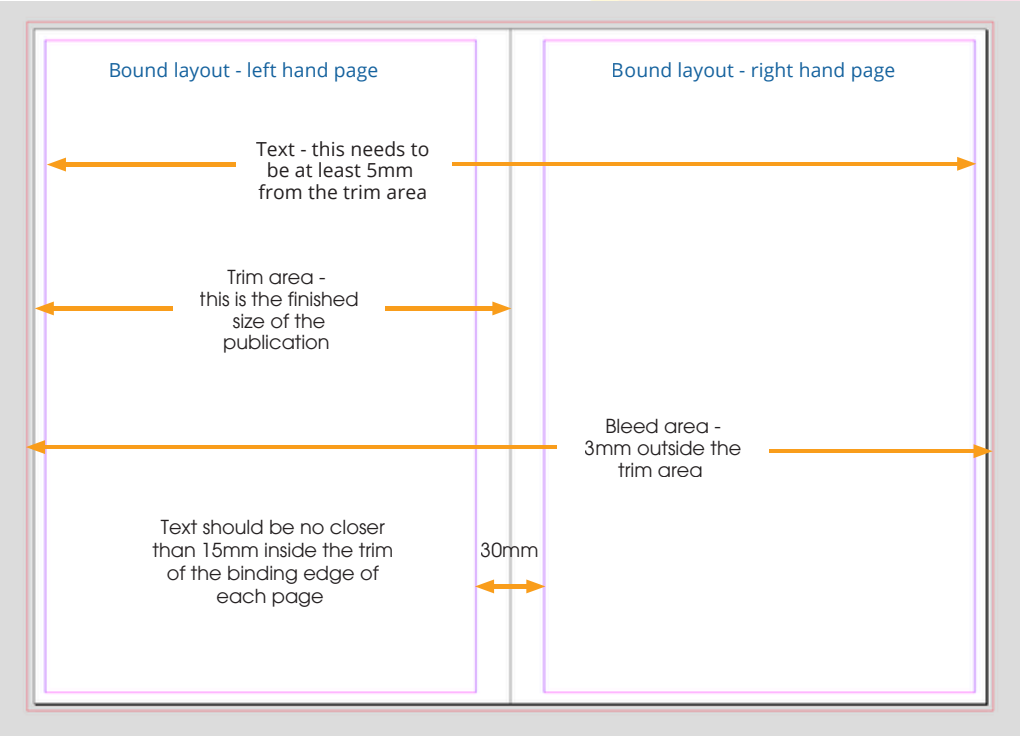
Saddle stitched publications are produced by stacking together printed folded sheets, one inside the other, which are then stitched using a continuous wire through the central fold line, giving the appearance of staples.

Double page “spreads” - saddle stitched publications:

- Where a continuous image or design runs across two pages to form a “spread,” no compensation needs to be made for a saddle stitched publication.
- Each page of the spread should be supplied as a separate PDF

Page Layout

Perfect / PUR Bound Publications



• Perfect / PUR bound publications have a cover and a glued spine.
• Allowance for the binding process needs to be made when creating files so that elements of the design are not lost within the spine.

Spine size
• The spine should be supplied as a separate file. 30mm
• Paper weights are subject to a manufacturing tolerance of +/- 5% so for accuracy, the spine size will be supplied by your account executive.
• For higher paginations, the spine size will be supplied after the text section has been printed.

Double page “spreads” - compensation required for bound publications
• Where a continuous image or design runs across two pages to form a “spread,” compensation needs to be made in a perfect or PUR bound publication otherwise some of the design will be lost when the spine is formed.
• It is inadvisable to flow text across two facing pages as there is always a small element that will be lost in the manufacturing process
. • Each page of the spread should be supplied as a separate PDF

Pre-flight & XMF Proofing

Pre-flight

• “Pre-flight” is the printing industry’s standard term for the process of checking PDF files to ensure the necessary digital data for printing is present and correct before uploading the document for printing.

• Undertaking a series of checks prior to approving your files for printing allows any potential problems to be spotted and rectified without incurring any additional costs

To further assist with pre-flight checks, blp’s XMF Remote system incorporates one of the most powerful and in-depth pre-flight checking tools available, Enfocus Pitstop, which will flag up key issues including but not limited to:

• bleed
• incorrect colour format eg RGB and not CMYK;
• spot colours
• fonts eg if they are not embedded
• resolution of colour
• low res images

XMF Proofing

Once your pages have been uploaded, they are available for soft proofing via the XMF system which allows you to check pages; reject pages; upload a replacement page or approve pages one by one.

XMF highlights any issues that may cause problems in the printing process so it is important that the on screen information is considered prior to approving the files for printing as once the files are approved and plated, any subsequent changes may incur additional charges.

If the page is not correct you can mark it by clicking the “reject” button.

If you rejected a page and it was in fact correct, you can reverse your decision by clicking this symbol.

If the page is correct you can mark it by clicking the “soft approval” button.

When all pages are correct you can click the “job approved” button.

Uploading Files

Uploading files to XMF

A comprehensive guide to uploading files into XMF Remote can be found in our separate document

Single colour plate changes

• Black plate changes to the text to create multiple versions of the text must be supplied as single black.
• If plate changes are supplied as 4 colour black, this is not a problem but additional plates will be required, resulting in additional charges.
• The same principle applies for any other single plate colour plate change i.e magenta, cyan, yellow or Pantone.
• Anything that changes from version to version must be set to “overprint” otherwise the single colour plate change does not work.
• You will be required to upload complete artwork for all versions, for example:
- If 8 pages of a 48 page magazine changes, you will be required to upload the full 48 pages for each version to be uploaded.
- If there is a single colour plate change throughout, we would require the full 4 colour version (or 5 colour version if there is a Pantone colour) to be uploaded.

Cutter guide

• A cutter guide is a path around your artwork which shows us exactly where you want any bespoke shapes to be cut, for example die-cutting a shape to be cut out.
• A cutter guide must be supplied separately and not within the uploaded artwork.

Foil block artwork

• The same content in your foil artwork should not appear in your print as it may show due to foil blocking tolerances / movement in application.

Spot uv files

• This is a finishing technique where a gloss uv varnish is applied to specific “spots” or areas of a printed cover, creating a contrast between the treated and untreated surfaces.
• Spot uv files must be supplied separately and be made in single colour black.

Checking Files

Files

- Files should be supplied as single page PDFs only
- We cannot print from files created in PDF Writer or supplied as Word etc.

Colour space

- Your application should be set up to the correct colour working space:
- RGB: sRGB IEC61966-2.1
- CMYK: ISO Coated v2 300% (ECI) CMYK

Pagination

- Text pages / self cover paginations need to be a multiple of 4.
- If there are intended blank pages in your document, these must be uploaded in the usual manner and advised to your account executive.

Trim size

- The trim size is the finished size of your publication; files should be supplied to the correct size.

Bleed / objects too close to the edge

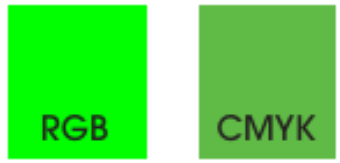
- 3mm bleed must be applied outside the trim area
- In XMF this can be flagged up because the pages have been designed in spread layout and one side of the bleed is part of the next page; XMF Pre-flight checks all 4 edges.
- XMF also checks every object on the page separately. If you have an image that only goes up to the bottom of the trim but does not bleed off then this will flag up even if you have a footer over the top that does bleed off.

Folios / object positioning

- Folios and objects should be at least 5mm from the trim area to allow for variation during the manufacturing process.

Checking Files Cont ...

RGB images



• RGB images must be converted to CMYK before they are printed.
• Supplied RGB images that are not converted to CMYK, will be converted by the system but the colours will be a CMYK approximation and may appear darker and / or not true to expectations.
• If colour management is turned on in InDesign, elements imported of a different colour space to the output space will be transformed into the final colour space when printed or exported directly to PDF.
• Adobe InDesign Select “Window>Swatches.” Colour spaces are shown as a small icon on the right. Use this in conjunction with the Ink Manager in the Print dialogue to convert Spots to CMYK.
• QuarkXPress 6.5 Select “Edit>Colours” to display all colours used and use the pop-up box to isolate non-Process colours – convert these to CMYK.

Crop marks / colour bars

• Crop marks are optional - bleed is not!
• If included, crop marks should start 3mm from the trim (outside bleed); not in the bleed or trim area.
• Colour bars are not required but if provided, these should be outside the bleed.

Four colour black / single colour black - rich black versus true black

• Creating black text out of 4 colours may cause issues - particularly with small type - and should be avoided.
• Black solids can be enhanced by creating a “rich” black – useful for creating luxurious backgrounds to make your design pop.
• Single colour black ie K = 100% in CMYK (true black) is ideal for sharp text and fine details whereas “rich black” - also known as “4-colour black” - uses a combination of CMYK to create a deeper and more saturated black, where C=75%, M = 68%, Y = 67% and K = 90%.
• Bar codes and QR codes need to be single colour black only

Checking Files Cont ...

Spot colours

- This may refer to pantones which will be converted to an approximation in CMYK unless otherwise specified.
- The presence of colour bars may cause spot colours to be flagged up by XMF.
- “Spot color all” when pre-flighting indicates the presence of registration black which should be avoided.
- Spot colours should not be used anywhere within the text.

Registration black

This should not be used anywhere within the text as it is used for tickmarks and is comprised of 100% all colours.

Pantone colours

- Pantone ink needs to be ordered in advance so, if required, this should be advised 72 hours prior to uploading files.
- As these are obtained to order, we will need to know the print run and the coverage to calculate the amount required.
- Please supply artwork examples illustrating the coverage eg masthead; covers only; tabs on all text pages where possible.
- Pantone colours not specified will be automatically converted to an approximation in CMYK and may not print as expected; there is no direct equivalent of a Pantone in CMYK.
- Proper Pantone colour names need to be used. Whilst the Pantone Library is no longer available in Adobe InDesign, we still require the Pantone colour to have the proper name so that it is recognised within our system. Failure to do this may cause printing delays.

Checking Files Cont ...

Fonts

• Ensure all the fonts are correctly linked. Delete fonts that are present in the document but not being used.
• Adobe InDesign Select “Type> Find Font.” This palette shows which font formats are in use and displays a warning triangle next to any problem fonts.
• QuarkXPress 6.5. Select “Utilities>Usage” and select the Fonts pane. Make sure no fonts are using any pseudo text effects such as bold or italics – only use styles present in the original typeface family. Click the “More Information” box to display format and location information.
• Check before using TrueType / OpenType font formats to ensure they will output correctly.
• Fonts should be embedded to maintain the typographical accuracy of the artwork; this should prevent font substitution and ensure the text is seen as intended. If a font is not embedded, then this could lead to illegibility or missing characters or words.
• Remember to “include all fonts” when preparing PDFs.
• Please note, Adobe removed support for Type 1 fonts in 2022.

Type 3 fonts

• Type 3 fonts are postscript fonts which were used to create elaborate designs and at one stage were quite popular but are not widely used now and should be avoided for print.
• Type 3 fonts are unpredictable as they do not always translate from one medium to another and can cause printing problems due to incompatibility issues.
• Low resolution proofs will not necessarily preview the problem so it is important that if flagged up, this is addressed.

Overprinting

• Overprinting can be used for special effects within a design but if the PDF supplied has been set to “overprint”, this instruction tells the press to print the colours underneath the white text and as a result, white objects or text can be knocked out resulting in missing items in the printed publication.
• To guard against unintended overprinting, set Acrobat preferences to “show overprint”to check files. Using Adobe Acrobat, open file, open the “output preview”, select “colour warnings” then tick the box “show overprinting”. If “output preview” isn’t visible, open file, go to “Tools > Protection & Standardise” and select “print production” which will allow you to select “output preview” and select “colour warnings” then tick the box “show overprinting” which will replicate what will be seen on the page.

Checking Files Cont ...

Fine lettering / lines

• Thin rules (lines) and medium and small type sizes should be produced in single colour only wherever this is possible.
• As printing is a mechanical process, there is always going to be very small degree of movement during the printing process and very fine rules and medium and small type sizes that are made up of 4 colours may appear “fuzzy” when printed as a result of this.

Resolution and file size / low res images

• Typically, the resolution of an image supplied for printing in the magazine sector is 300dpi (dots per inch) - the more dots, potentially the sharper the image, however a high dpi does not mean a high quality image.
• If the image resolution is too low, the results will be of lower quality and can result in image pixelation. If too high, this can make files bloated and make them take longer to transmit.
• Over-compression or over-sharpening can result in unwanted artifacts, for example halos / lines.

Images created using AI

• Care needs to be taken if using AI-generated artwork as not all AI-generated images are optimised for printing. Designs which look good on screen may appear blurred or pixelated when printed so always check the resolution and file quality before sending artwork to print.
• Things to look out for: Low resolution images - AI-generated images are often intended for digital use and not specifically for print so the resolution is lower, typically 72 dpi (dots per inch), not the 300dpi recommended for print. When scaled up, they can become pixelated or blurred if they are too low res.
• File types – some AI tools export in basic file formats like JPG or PNG and not vector files (e.g. AI, EPS, or SVG) which can create issues when resizing, colour matching, or using artwork across different formats.
• Fonts and colours may not always reproduce as they appear on screen
• No bleed, safe zone or crop marks – artwork needs to be supplied with bleed to avoid white edges when trimmed and important content should be within safe zones but these are not a given with AI software so the finished image may be incorrectly trimmed or have key elements missing.

Checking Files Cont ...

Colour coverage / total area coverage (TAC) / minimum coverage

• As print is made up of inks dots; a minimum number of dots are necessary to achieve coverage, particularly for very fine lines or very light shades. The total ink density in any area must not be less than 5% otherwise this may not print as intended.
• Combined colour values (TAC) should not exceed 300%. If exceeded, it may result in the ink not transferring to the sheet effectively and may cause printed sheets to blister or stick together.

Placed images

• Ideally, every image should be placed at 100% of its original size.
• Check resolutions and colour spaces; where possible try to carry out any re-sizing in Adobe Photoshop rather than in your page layout application as this adds to potential output problems.
• Digital images will proportionally increase or decrease in effective resolution if made smaller or enlarged on page eg a placed 300dpi image reduced by 50% will have an effective resolution of 600dpi; the same image enlarged by 50% will effectively be 150dpi. (This does not apply to pure vector artwork).
• Adobe InDesign Choose “Window>Links.” Modified or missing links display warning icons next to the relevant image. To display image data in InDesign (colour space, resolution etc), select the image and go to “Window>Info”. This palette displays the position of the object, the file format (ie, TIFF), the actual and effective ppi (the resolution of the original image and the resolution at its current placed size respectively), the colour space and any ICC profile information.
• QuarkXPress 6.5 Verify your images in “Utilities>Usage” in the Pictures pane. Click More Information for details such as colour space and original resolution.

Checking Files Cont ...

Vector illustration software

• Files originated in Adobe Illustrator or Macromedia Freehand should have all fonts embedded or outlined. Their colour space should be set to CMYK and all transparent elements should be flattened.
• In Illustrator, use “Edit>Transparency Flattener” Presets – though check with your supply chain as some publications may require lower values.
• Freehand ‘fakes’ its vector transparency effects by calculating overlapping colours, so does not need to have its files flattened. • Any bitmaps contained within a vector file should be embedded to avoid problems with missing links, otherwise when it comes to output the images, low-resolution thumbnails will be used.
• In Illustrator the rasterisation must be set in “Effects>Document Raster Effect” Settings set to CMYK and 300dpi. • Bitmaps placed in ostensibly vector-based documents must be treated the same way as placed images in QuarkXPress or Adobe InDesign: they must be at 300dpi at their final printed size; so care must be taken when resizing.
• Complex vector images should be converted to a high res image to prevent rendering issues.

Transparency flattening

• Adobe InDesign creative effects, such as drop shadows and transparency, rely on effective flattening of the file before output, otherwise the final output will often encounter problems.
• In work where text and graphics are on separate layers, if possible, keep text layers on top and set “Edit>Transparency” Flattener Presets.

Display calibration

• Monitors need frequent recalibrating. Any dramatic change in the immediate environment may negate calibration settings; a computer’s immediate surroundings can also influence / distort colour perception.
• It is preferable to use a neutral solid grey background on a computer display as a colourful background on a monitor can impair the ability to judge on-screen colour.

Colour Space

CMYK is used for printing - not RGB

Files must be supplied as CMYK and not RGB.

RGB – red, green, blue

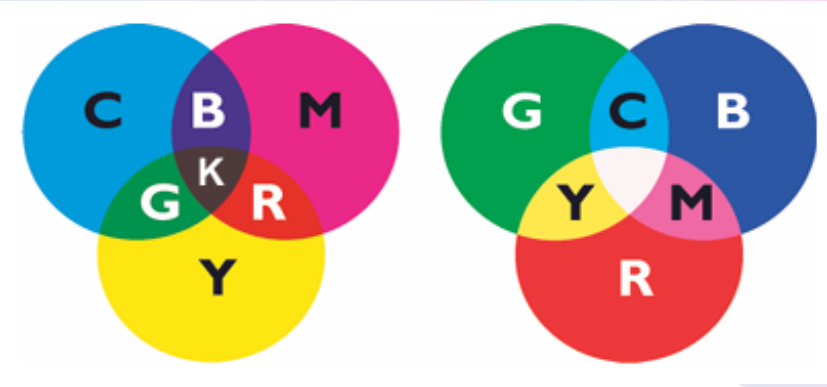
The way the human eye sees colour and the way computer monitors emulate colour – is an additive colour space: adding the full strength of each red, green and blue element (measured on a scale from 0 to 255) displays white. The most common RGB colour spaces are sRGB and Adobe RGB (1998).

CMYK - cyan, magenta, yellow, “key” i.e. black

CMYK was developed for the printing press: four colours are laid one at a time using a system of dots. CMYK is a subtractive colour space; each element is measured from 0 to 100 per cent strength.

There are fundamental differences in the way images are viewed on-screen or on a hard copy proof, not least because a monitor is back lit and can make everything appear very much brighter. The main difference between CMYK and RGB is that white doesn’t exist in CMYK: using zero per cent of each element actually means no colour will be printed, leaving the pure colour of the paper.

The range of colours reproduced with CMYK compared to RGB is mainly down to the viewing method, i.e. reflective viewing, where the substrate and surface finish have an impact as do the dyes and pigments which can never be perfect.



The number of discrete colours that can be defined is a function of the bit depth, so 16.7 million RGB options comes from 8 bits per channel with 3 channels. CMYK values are represented by percentages where the underlying definition is still in 8 bits per channel, so as many colours can still be defined but because of the way in which these are viewed the range of colours created by these definitions will be smaller, circa 16,000 options

Image Resolution

The resolution of an image is referred to as the dots per inch or “dpi” - the more dots available, potentially the sharper the image, however a high dpi does not automatically mean the image quality is good.

For the best results:
• image resolution needs to be 300dpi (minimum 150dpi)
• The image quality needs to be of the highest standard

• Confusion can arise from the fact that resolution and dimensions are not fixed for any graphics file format: a file can be supplied at any resolution and any size; a digital image also has no inherent PPI/DPI value – resolution only matters for an output device, such as a monitor or printer. eg a 1000 ×1000 pixel image could be printed at 4 × 4 inches and 250 pixels per inch, or at 10 ×10 inches and 100 pixels per inch.
• The way to interpret an image is to divide the pixel dimensions by the resolution (dpi) of the output device to give the optimal print size at that resolution. Therefore the resolution should always be changed to 300dpi when images are submitted as this allows a designer to see immediately its maximum optimal print size.
• Re-size the image proportionally to 300dpi in Adobe Photoshop (using “Image>Image Size”, with re sampling turned off), then save it down in a loss-less format such as a TIFF.
• Turning re-sampling off means changing the image size and resolution without changing the number of pixels in the image, therefore as the resolution increases the print size will proportionally decrease but in a completely non-destructive way.
• Blowing up an image will entail a proportional decrease in its resolution and therefore a potential drop in quality.
• Reducing an image’s size on the page will increase the pixel density and increase its resolution (though not necessarily its quality).

Image Resolution

Proofed images - XMF

• XMF proofs are primarily intended for checking that content hasn't shifted and to highlight any colour conversions that may have occurred, eg if RGB images have been automatically converted to CMYK.
• The proofs generated by XMF are lower res for speed of processing so it is important to check the visual quality of all images at 100% of their pixel size to ensure that you will be happy with the printed result.
• If an image appears pixelated; is of poor quality and / or of low resolution both on screen and in your final PDF prior to uploading your file, this is how it will appear in print.

Hard copy proofs

• Sherpa proofs are for content / layout only - they are not colour correct.
• Hi-res proofs are colour correct. These are output on photographic paper so the final printed image will be dependent on the selected paper and the overall printing process.

blp.

For support or general enquiries, please contact our Studio Team.
We aim to respond to all enquiries within one business day.

Email: StudioSupport@blpprint.co.uk

Response Time: Monday to Friday, 8:00am–4:00pm (GMT)
(Excluding bank holidays)

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