
PERFECT RESULTS EVERYTIME

The Bambra Guide to Prepress Perfection

Printing. Why does it sometimes go oh so wrong?

Most failings can be traced back to poor planning in preparation. This can include not supplying correct versions of fonts, incorrect colour spaces in images, or not designing a layout that best serves the final binding method. As much as it pains us to say it, it's often your fault.

But don't worry. Helping customers navigate the tricky waters of Prepress is a personal mission of our fearless leader, John Wanless — one shared by all at Bambra. That's why we've put together this guide. Its purpose is to help you develop best practices for a trouble-free journey through Bambra's Prepress department and beyond.

If all is well in Prepress, your job stands every chance of enjoying a smooth journey through our Press and Postpress areas, too. Which means:

- Meeting budgets and saving money
- Meeting deadlines and saving time
- Taking some pressure off the environment
- Taking some pressure off yourself.

So please read on. You'll benefit from Bambra's 30-plus years of experience in such matters. And you'll find out how Prepress perfection can help ensure perfect results every time.

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PLANNING

Like Benjamin Franklin said, “By failing to prepare, you are preparing to fail.” And like our Prepress staff sometimes say when having to fix badly prepared art, “At this rate I’ll be here until three in the morning.”

A little planning and preparation at the start will give your project its best chance of being completed efficiently, within budget and with pleasing quality.

So first, to ensure your project is on the right track from the start, ask yourself some questions:

What do I want to create and how do I achieve this?

How will my design work best and how do I need to set up my layout for the chosen binding method?

How is the stock I am printing on going to affect my images?

Can I afford to annoy Prepress staff by making them work until three in the morning to fix my oversights?

PREPARATION

Here are some of the most important things to consider before preparing your final artwork.

Binding

Before typing your first line of text please think about which binding method will be used for your print job. Is it going to be saddle stitched, or perfect/burst bound? Or maybe wiro bound? Each of these binding methods can have different requirements for setting up our page layout file. Each requires attention to the amount of pages being bound, too. It's also a good time to think about whether you'll be using any folds and how the binding will affect the folding process during finishing. Prepare carefully and you won't end up in a potentially costly bind yourself.

Paper Stock

Knowing the type of stock being used is important for proper conversion of images. To get the best results you need to use an appropriate colour profile for the type of stock being used. If you're undecided at the start of a project you can choose a profile that will work well with both coated and uncoated stocks.

File Format

Which file formats can Bambra accept? In short, anything created in Adobe Indesign and Quark Xpress, as these are fully professional applications designed for high-end use. We can also accept Adobe Illustrator which is a vector-based drawing application primarily used for logo and illustration creation. For image manipulation and colour adjustments Adobe Photoshop is the pixel-based application of choice. Don't be tempted to use Photoshop to create entire jobs, however, as your text will not appear sharp and smooth.

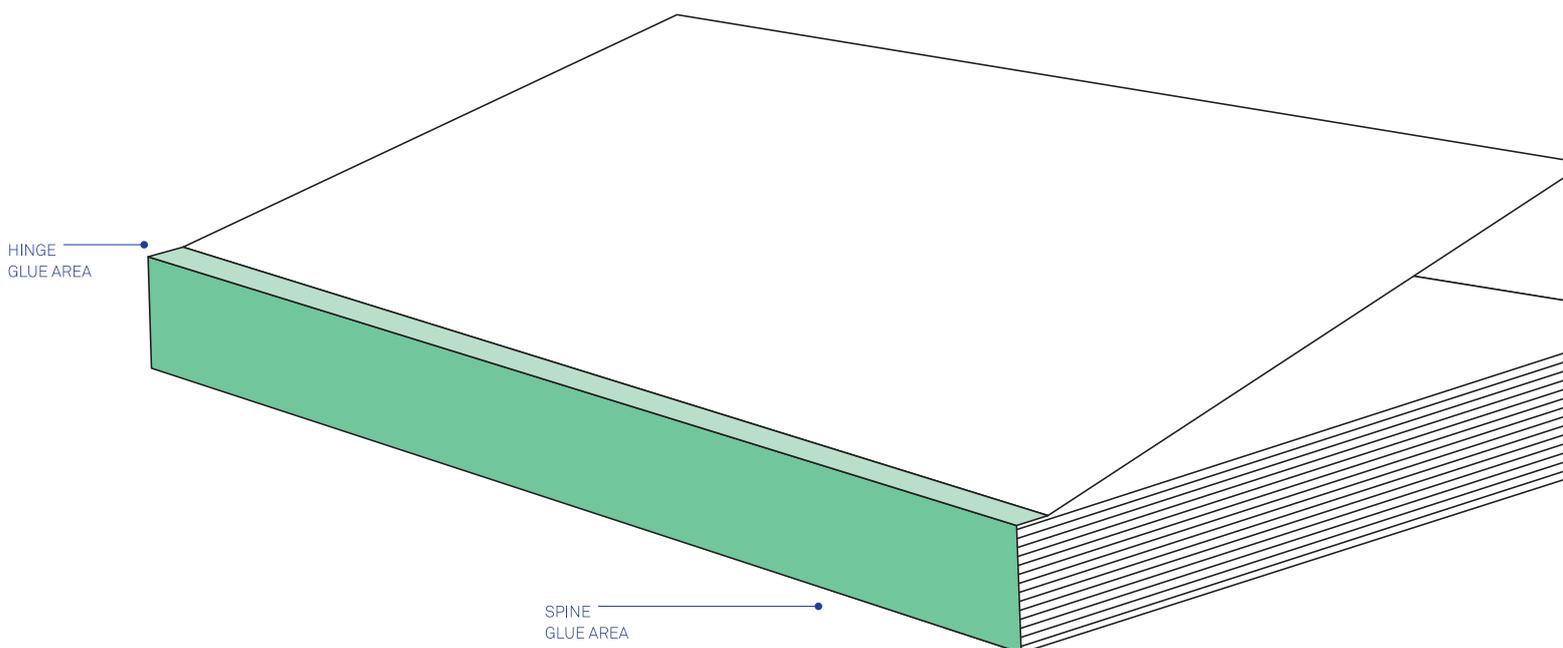
It's also a good idea to ensure that all copy in a your job is correct before reaching Bambra Press. Contrary to popular belief, copywriters are, at times, fallible, and any alterations done after the first round of proofs incur a charge. We do spellcheck your files, and nothing would make us happier than to discover we didn't have to. When it comes to checking copy, prepare, or pay the price.

PERFECT/ BURST BOUND

You must consider several things when creating artwork for a perfect/burst bound book.

The cover must allow for the spine, determined by the number of pages and the weight of the stock being used. Allowance must also be made for a hinged area on the front and back cover. This hinge will affect the inside covers plus the first and last pages of the text. Design elements should not be within this area unless you plan on them being unviewable on the final product. Any text or image that is to continue across these pages needs to be positioned to achieve correct alignment.

Also important to consider is the use of elements across double page spreads. The fact that the pages don't lay flat when the booklet is opened makes the alignment of elements on adjoining pages appear out of position. Care should also be taken in how close text is placed to the spine as this can also get lost into the binding.



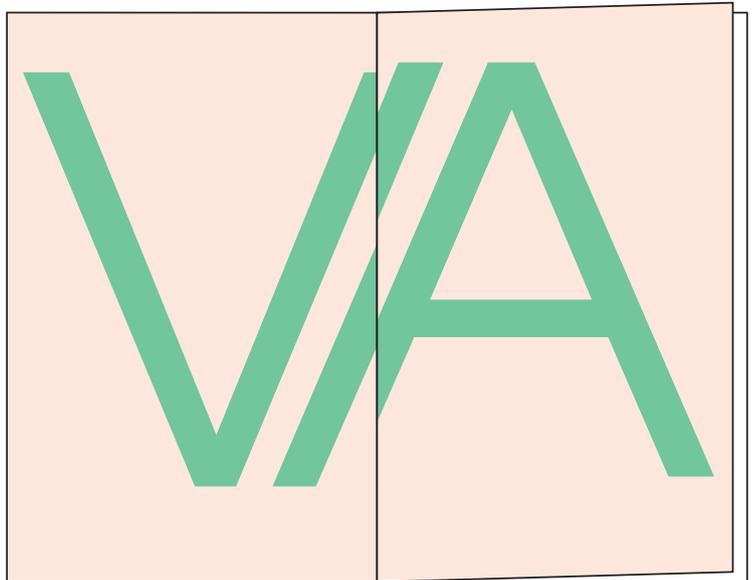
Allowances: Example 1

Here's the inside cover of a job that requires alignment to page 1 due to the image going across both pages. To allow for the glue that holds the book together inside the hinge (see left page). The result is that both halves match when they are bound together.

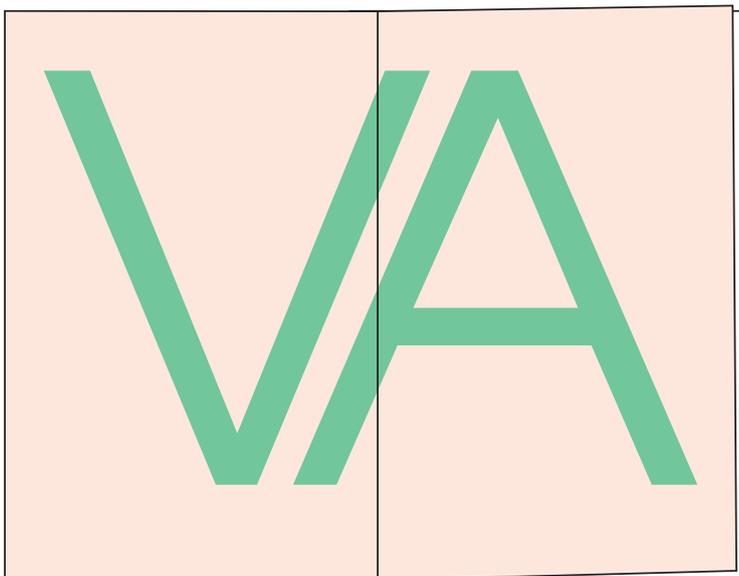
The image on the left page shows how much of the inside cover has glue applied to it for the binding (the darker strip down the middle is the spine and the lighter is up to the hinges).

Above left shows how the booklet would look if the allowance were not made and above right shows the correct result with the allowance made.

EXAMPLE 1
NO ALLOWANCE ADDED



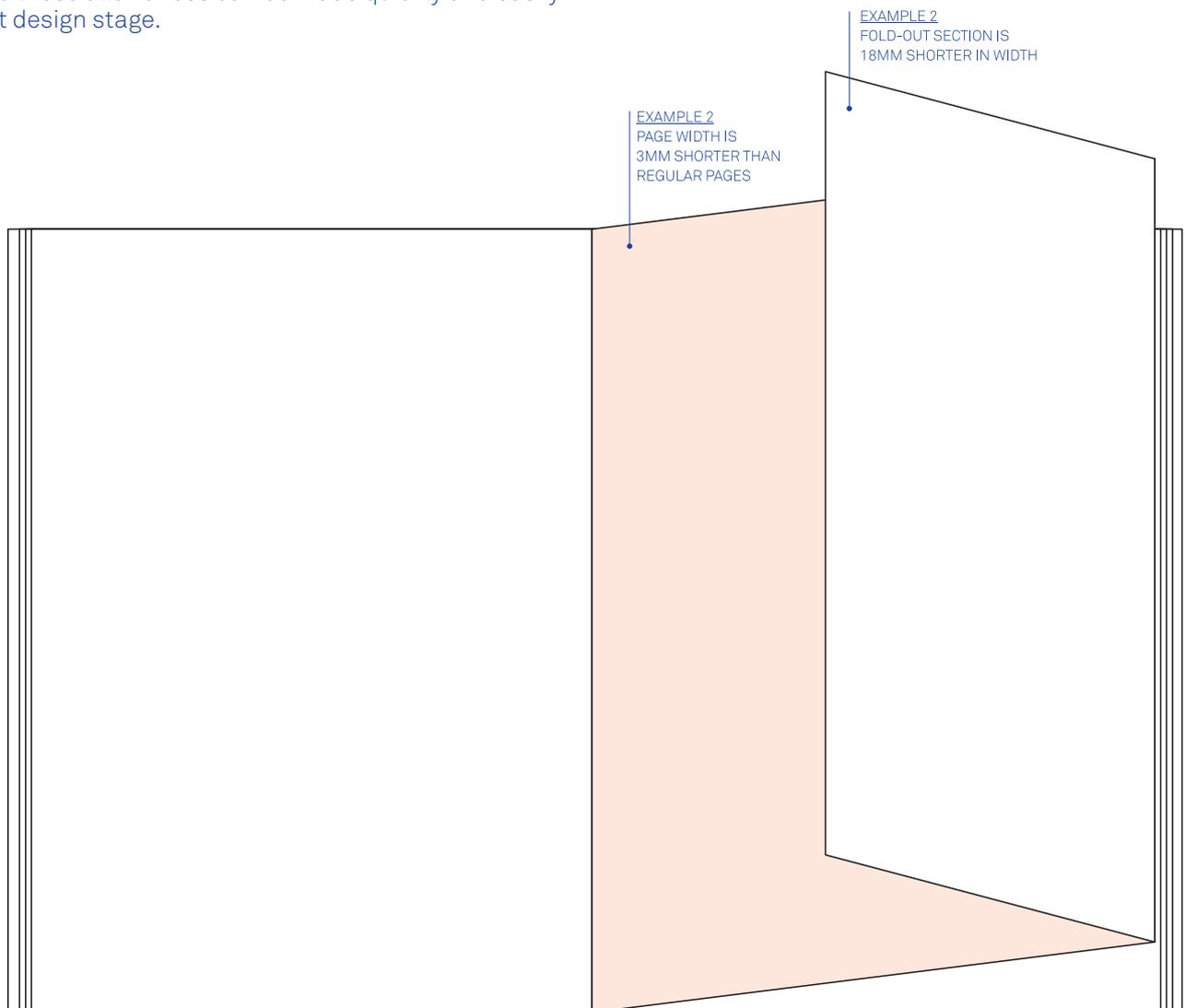
EXAMPLE 1
LEFT-SIDE OF IMAGE MOVED 7MM LEFT
RIGHT-SIDE OF IMAGE MOVED 7MM RIGHT



Allowances: Example 2

Something else to be careful about with perfect/burst bound jobs is the measurements of pages for a fold-out section. Due to trimming and binding requirements the page that is bound needs to be 3mm shorter in width than the standard pages within the job, and the foldout page needs to be 18mm shorter than the standard pages. If the bound page were the same size as the other pages, the foldout would get trimmed off when guillotined. And the folded page needs to be so much shorter so it can open without hindrance from the binding.

Thankfully, application designers are on your side. With the introduction of Adobe CS5 it's now possible to have different sized pages within the one document, so these allowances can be made quickly and easily at design stage.



SADDLE STITCHING & WIRO BOUND

Saddle Stitching

Design considerations remain largely unfettered when opting for saddle stitch binding. The main pitfalls can be avoided by what we call 'creep' allowance (which, we assure you, has nothing to do with the designer's ego).

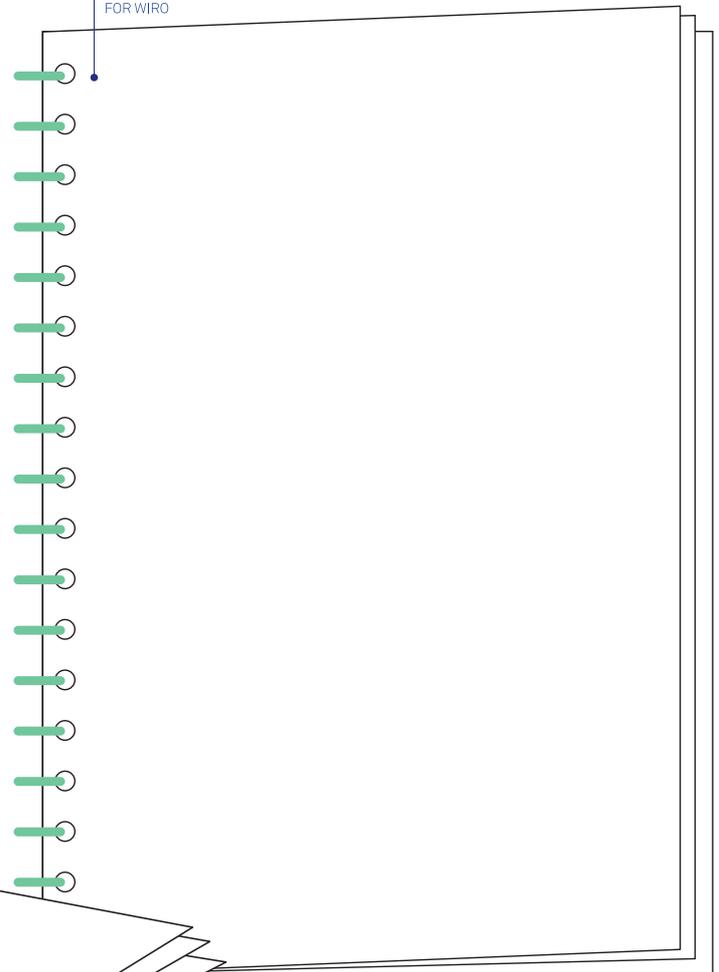
Bambra Press will look at any saddle stitch job and decide whether or not creep needs to be allowed for. This said, it would be wise not to have folio numbers too close to the edge of the page (not within 3mm) as it is not a flawless binding method. Where possible, also avoid having even page borders, as, due to the inexact nature of the production process, it can be difficult to achieve the result you might be hoping for.

As with perfect/burst bound, if you require a fold-out section, you'll need to ensure that the pages involved are reduced in width to enable proper folding and trimming.

Wiro Bound

Any job that is wiro bound needs to be set up as single pages in the page layout program. Due to the fact that each page is cut down to size by cutting all four sides, all four sides require bleed. Obviously (although judging by past experiences, perhaps not so) this is not achievable if the page layout is set up as spreads. Just remember that you will need to have different margins on your left and right pages to allow for the extra space required for the wire to go through. If your project doesn't have any elements that stop at the spine the layout file can be set up in readers spreads.

ALLOW ADEQUATE
INNER MARGINS ON
LEFT & RIGHT PAGES
FOR WIRO



WIRE STITCH
OR STAPLE

FOLDING

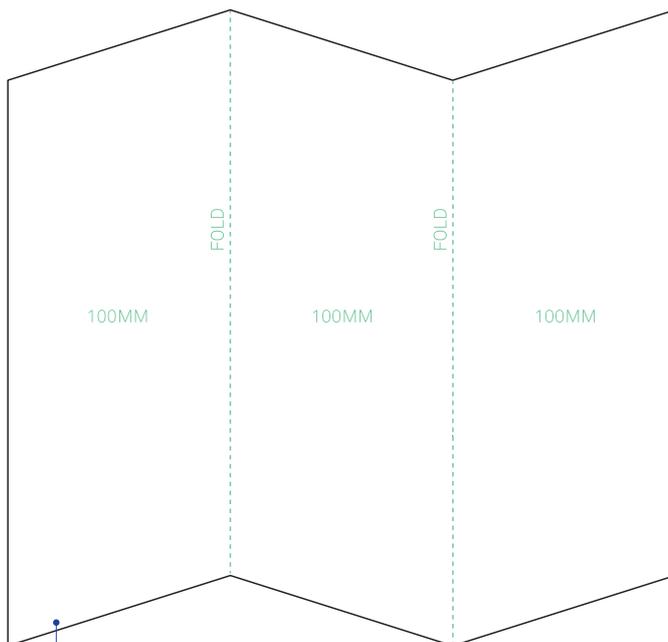
You don't have to be a Japanese origami master to master the art of paper folding in the print process. You do, however, need to pay attention when preparing your artwork if you want to avoid folds that simply don't.

Roll Fold

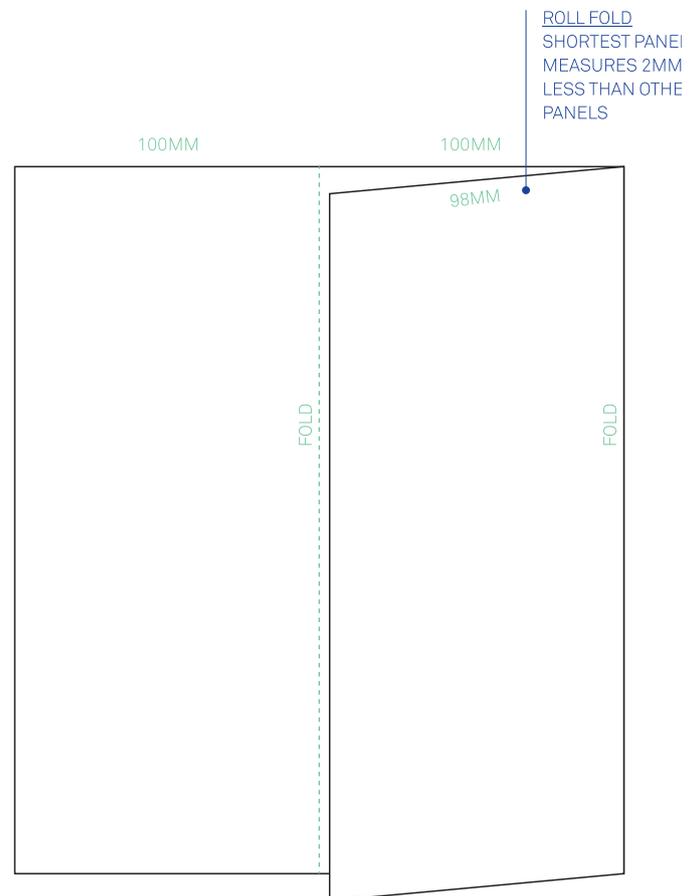
As the diagram depicts, not all pages are equal when it comes to roll folds. Each successive panel must decrease in size if it is to fold correctly into itself. Allow a 2mm decrease per fold, and try to limit the number of folds so as to avoid unwieldy or bulky results. Heavier weight stocks might require greater allowances, so don't be shy in seeking advice from us.

Concertina Fold

Sometimes referred to as an accordion fold, the concertina fold does not require panels to be sized differently. They do present their own challenges, however, such as ensuring appropriate stock weight if the piece is to be self-standing, or the fact that when intended for mailing they can be difficult to insert mechanically into envelopes. It's always a good idea to ask about potential problems when you first get the idea to fold — not after you've committed to it.



CONCERTINA FOLD
ALL PANEL MEASUREMENTS
ARE THE SAME SIZE



ROLL FOLD
SHORTEST PANEL
MEASURES 2MM
LESS THAN OTHER
PANELS

ART & IMAGE RESOLUTION

The quality of the end result is only as good as the quality of the artwork you prepare for us. If you default to a “she’ll be right” attitude at this point in proceedings, chances are she won’t be.

Use the correct software for the job at hand. The best applications to create your job are the ones designed to do so. Create page layouts in Adobe Indesign or Quark Xpress. Illustrator is an illustration application — good for creating logos but not so good for page layout. Photoshop is the big daddy of the image manipulation world. We do not support Microsoft Word, Microsoft Powerpoint, Microsoft Publisher or Corel Draw.

For best results and swift processing in the Prepress department ensure all images are rotated in Photoshop before placing them in the page layout. Images should be resized in Photoshop to enable them to be placed as close as possible to 100% in the layout file. If you don’t do this, expect delays in Prepress and possible degraded quality of the printed job.

Images with too little resolution will come out pixelated and images with too much resolution can occasionally cause quality issues too.

Image Resolution

Remember that saying about the sow’s ear? It’s as true for printing as it is for purse-making.

It’s impossible to provide high quality printing using low quality artwork. The quality of your images determines the quality of the end result. Only high resolution, well converted images will give you a truly pleasing print job.

As a rule of thumb, colour and greyscale images should have a resolution that is twice the screen ruling. So if you are printing at 175 lines per inch, your image effective resolution should be 350ppi. Effective resolution means the resolution of an image at its placed size. For example, if you place a 300ppi image at 200% size the effective resolution would be 150ppi. Line art bitmap files should be at least 600ppi.

Another old rule of thumb (the best kind) is that images should be placed at 80%–120% of actual size for optimal results. Resolution naming varies from place to place. Raster images (tiffs, etc) measures resolution in ppi (pixels per inch) whereas dpi (dots per inch) is the unit used for an output device such as a CTP machine (ours is 2540dpi).

COLOUR SPACE

For predictable (and perfect) results images for the offset printing process should be CMYK (Cyan, Magenta, Yellow and Black). This is what prints on the presses. Images supplied as RGB (Red, Green and Blue) need to be converted to CMYK at some stage of the process and it is best to do so at the start so you can have better control and avoid nasty surprises. Due to RGB's large gamut not all colours are reproducible using CMYK so it is better for you to see possible shifts in colour at the conversion time rather than at the proof or print stage.

There is a number of good ready made profiles around to be used for colour conversion. Some good choices for coated paper printing could be either the ISO Coated v2 (ECI) or the Coated Fogra39. For uncoated, the PSO Uncoated ISI12647 (ECI) is a good choice.

If you're not sure which stock your job is going to be printed on, or it is to be used for multiple jobs, you could use the ISO Coated v2 300% (ECI) profile which would give a satisfactory result on either coated or uncoated paper. Stochastic Screening (FM) has different characteristics to traditional screening, so if you're planning to use it you'll need different icc profiles in order to view colour conversions correctly.

ISO Profiles can be downloaded from the ECI (European Color Initiative) at <http://www.eci.org/doku.php?id=en:colorstandards:offset>

You'll also find a number of Fogra profiles packaged with the Adobe Creative Suite software.

SCREEN VS PROOF

When evaluating the colour of images on your computer don't go by the representation on your screen unless it is accurately calibrated using professional monitor calibration software and hardware. Even if it is properly calibrated remember that it is showing RGB transmitted light rather than light reflected from CMYK pigments.

The best and most reliable way to judge colour is by using absolute numbers such as in the CMYK breakdown in the Photoshop INFO palette, or on a colour calibrated proof.

At the end of the day our proofs are carefully calibrated to our printing processes to give the most accurate representation. That said, proofs are considerably lower in resolution than to the final printing plate, which enables the final print to have extra detail.

SPOT THE PROBLEM

How many colours is your job to print? Is it to print as spot (pms) colours or should it be CMYK? Maybe a combination of both.

Keep control of your job by ensuring the correct colours are the only ones used. If your job is CMYK then ensure that all spot swatches have been converted in the document. One thing to watch out for is the CMYK breakdown of spot colours from within different software packages, and even from within different versions of the same software.

Colour libraries change from version to version which can lead to different CMYK representations of colour so it pays to look at all applications used (linked files as well) to ensure the colour will appear the same. Delete all unused colours.

A good idea is to have a look at the separations to ensure they are as you expect them. This can be done in Adobe Indesign by pressing the Shift key and the F6 key at the same time (or Window/Output/Separations Preview) or in Adobe Acrobat Pro by going into Advanced/Print Production/Output Preview. Doing this at design stage minimises delays and protects against error.

LAYOUT DOCUMENT SIZE & BLEED

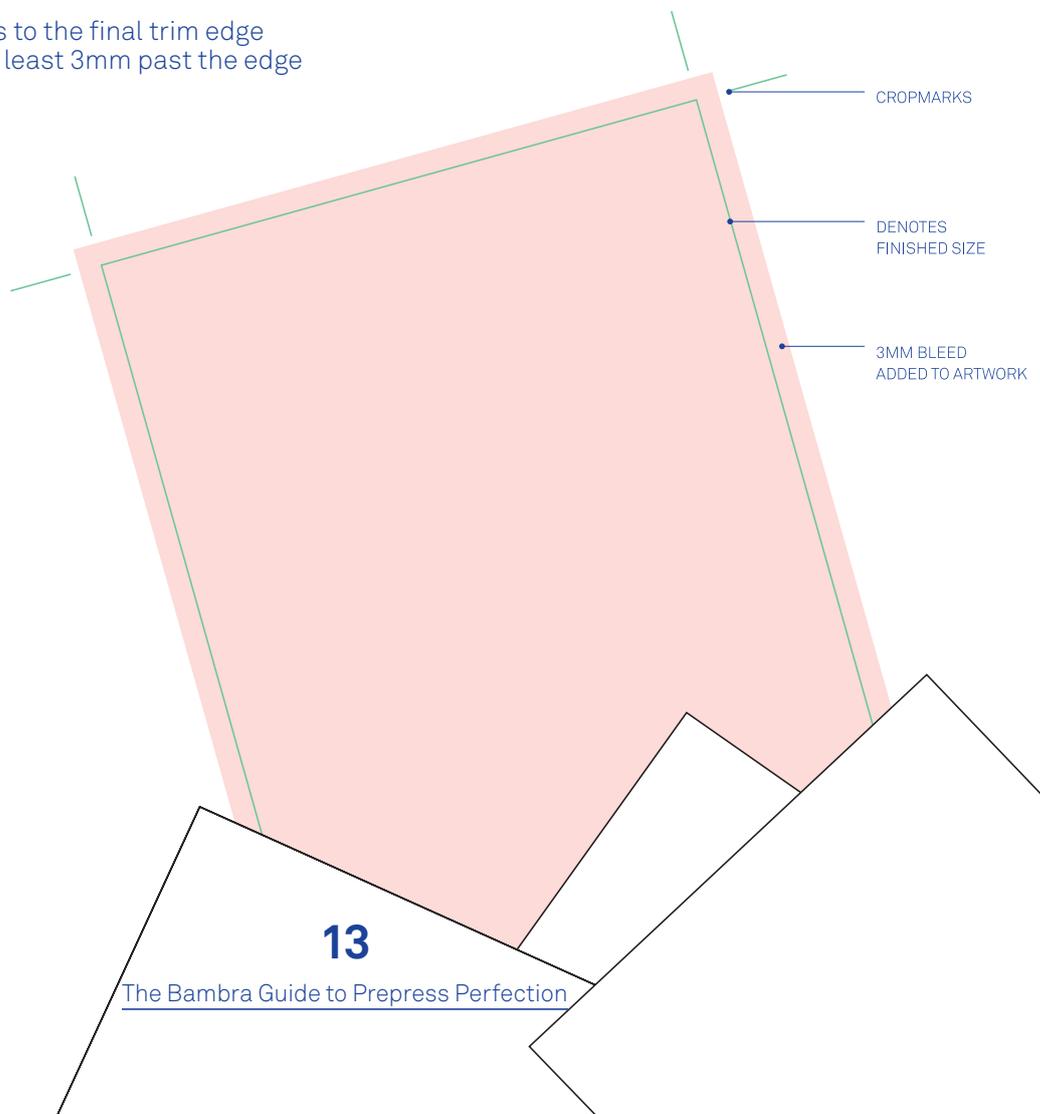
A lot of files come through Prepress that are incorrectly set up. One common problem is, for example, when a business card is placed in the middle of an A4 layout with trim marks drawn on.

If you want to set up a page layout file for a business card, the layout document size should be set to 90mm x 55mm at the start. The trim marks will automatically be added on the exporting of the file.

And with regard to imposing files, please don't.

Any files that have been imposed by the designer need to be pulled apart back to single page by us to work with our workflow.

Any element that extends to the final trim edge needs bleed extended at least 3mm past the edge of the document.



CHECKS FOR TRANSPARENCY

If you use Transparency (Effects in later versions of Indesign) perform these simple checks to ensure its correctness. If you are in Indesign look at your the job with the separations preview on. This gives a more accurate indication of how the job will print.

Also, if the job is to be spot (pms) colours, turn on and off various colours to ensure they are going to print correctly. Some of the Transparency Effects don't work with spot colours and will end up in the CMYK separations.



CHECK THAT ALL
TRANSPARENT
COLOURS WILL PRINT

TOTAL INK LIMIT & RICH BLACK

To minimise problems on the printing side of things please try to keep your total ink limit to a maximum of 330% for coated stock and 300% for uncoated (TIL is the sum of the percentages of each colour).

Any coverage more than this will cause problems with drying of the printed sheet which will result in the delay of delivery of the final job. It can also cause the job to set off, which is not on our top five thousand most recommended things to do for a quality print job list.

For any large area of Black ink it's wise to run a Rich Black to avoid it looking washed out. This can be achieved by creating a colour swatch with 100% Black and 40% Cyan. Or, for something more neutral looking, use 100% Black, 30% Cyan, 25% Magenta and 25% Yellow. Please note that any items coloured in Registration will default back to Black only in our workflow.

TEXT FREE AREA & TRAPPING

Try to allow at least 3mm between text and the trim area. This will ensure nothing will go missing at the finishing stage. Oops, that should be stage.

Please do not try to trap your files. Our workflow does this automatically. If you have any special requests with regard to trapping please let us know when you submit your job.

LEAVE AT LEAST 3MM
BETWEEN ANY TEXT
AND TRIM AREA

THAT'S WHA
DO, COLOUR
THAT'S WHA
ALL DO IN A
SENSE VOI

DIELINE/ FORME CUTS & VARNISHES

Jobs with Dieline/Forme Cuts in them should have the cutting shape supplied on a separate layer of your page layout document and be clearly labelled as Forme Cut or Dieline.

Varnishes should also be supplied on a separate layer and clearly marked with the type of varnish required. For example, Gloss Varnish, Matt Varnish or Spot UV.

SUPPLYING FILES

Both main professional desktop publishing applications have a file collection utility built in. Indesign has its 'Package' function and Quark Xpress has 'Collect for Output.' We strongly suggest that these be used for the collection of files and fonts before supplying them to us. Any missing linked file or font will cause a delay in your job. Speaking of fonts, please ensure the correct version of each font is supplied. Even though some fonts from different manufacturers have the same names, they are not always exactly the same. Although the differences may only be subtle they can cause the type to reflow.

PDFs

If you intend sending us press ready pdfs to work with, please ensure that they are supplied as single page pdfs and not set up in spreads. All pages must have at least 3mm bleed and have crop marks that are also offset by 3mm. All fonts must be embedded. The file should be in CMYK (plus spot if required) and have high resolution images. If there are alterations to be made you will need to supply a new correct version of the file.

Hard Copy

We encourage our clients to supply laser prints (preferably at 100% size) for all jobs they submit. With the digital age this is not always possible. If you are sending files via electronic means please try to supply a pdf for viewing purposes. This is often handy as a point of reference if we need to double check and avoid a potential problem.

File Delivery

There are several ways to deliver your files to Bambra. CD, DVD, flash drive, hard drive, download from your FTP site, email, or You Send It. Of course, hand delivery allows us to say a quick hello, which is always nice.

PREPRESS PROCESS

At each stage of the Prepress process we ensure you're happy with the way your job is proceeding. And proofs are the tried, true and invaluable aids in getting your approval.

Generally, the first round of proofs supplied will consist of the following:

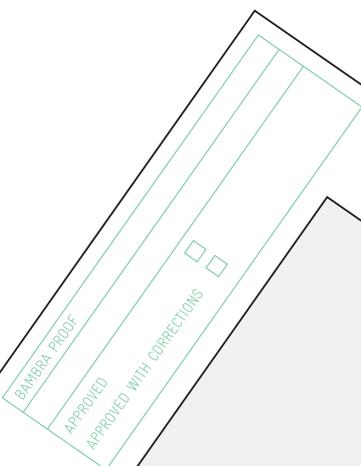
- High Resolution Proofs on either a coated or uncoated stock determined by which paper your job is to be printed on; and
- Low Resolution Content Proofs as a mock up (for any double sided job). By mock up we mean folded and trimmed as the final prints will be to ensure correct page order in the pagination process.

After any text alterations are made, Secondary Proofs will be supplied as Low Resolution Content Proofs and/pdfs that are rasterised by our Heidelberg Prinect Workflow. If colour corrections are made it is a good idea to get new High Resolution Proofs. Contract proofs should be examined under standard lights D50 (5000K) as other temperatures of light will alter the true appearance of the final result.

Perfect

If at any time you have questions about the Prepress process and its requirements—or about any of the print processes here at Bambra—we're here to help.

Through the combination of our printing expertise and your diligence in preparation, you can expect nothing less than perfect results every time.



MARK-UP ANY
CORRECTIONS
ON PROOF

