



vision[®]

DESIGN | PRINT | MEDIA

Artwork Guidelines

A Guide To Help You Create Print Ready Artwork

Table showing Sizes and Resolutions

The table below is based on printing a portrait document at 300 dots per inch which will print at high quality. The following two pages, we have provided a size chart for both flyers and posters, which will show you the proportional difference in size based on an A4 page (standard paper 29.7cm x 21.0cm).

Size Name	Size in cm (without bleed area)	Size in pixels at 300dpi (without bleed area)	Size in cm (with bleed)	Size in pixels at 300dpi (with bleed)
Business Card	8.5 x 5.5 cm	1004 x 650	9.1 x 6.1 cm	1075 x 720
DL / Comp Slip	9.9 x 21.0 cm	2480 x 1169	10.5 x 21.6 cm	2551 x 1240
A6	14.8 x 10.5 cm	1748 x 1240	15.4 x 11.1 cm	1819 x 1311
A5	21.0 x 14.8 cm	2480 x 1748	21.6 x 15.4 cm	2551 x 1819
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A3	42.0 x 29.7 cm	4961 x 3508	42.6 x 30.3 cm	5031 x 3579
A2	59.4 x 42.0 cm	7016 x 4961	60.0 x 42.6 cm	7087 x 5031
A1	84.1 x 59.4 cm	9933 x 7016	84.7 x 60.0 cm	10004 x 7087
A0	118.9 x 84.1 cm	14043 x 9933	119.5 x 84.7 cm	14114 x 10004

Introduction

If you have been sent this sheet it is likely that there is a problem with pixilation on the design that you have asked us to print. Hopefully this sheet will not only explain to you what the problem is but also how to fix it.

Please note this is not a technical explanation and hence is not fully accurate in technical terms, we are aware of this but have created this to simplify an otherwise very complex topic. A quick thanks to all those designers emailing us!

What is the Problem?

Most pictures on a screen are made up from small dots of colour. Each picture is made up by a certain number of dots or pixels. Quite simply the higher the number of pixels the higher quality the picture and the larger it can be displayed or printed without distorting. If a picture is enlarged beyond a certain point it will begin to distort and appear blurry.

But my Picture/Logo looks fine on screen?

A screen displays at 72dpi (dots per inch) where commercial presses print to 300dpi (Different type of dpi compared to consumer printers!). To see how a press would print your logo or picture, zoom in to 400%, or display the image four times as large as you would like it to appear when printed. This will give you an idea of how it would look when printed.

Example

There are three examples of the Vision Logo logo below, each is at a different resolution. At 100% zoom all the logos should look clear, however when you zoom in you should see the differences.



DESIGN | PRINT | MEDIA
Logo 1 - JPEG at 72dpi



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Logo 2 - JPEG at 300dpi



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Logo 3 - Vectored File Type

If you zoom into this document to 400% you will be able to see;

- Logo 1 is very distorted and if printed this would be very obvious. (Don't believe us, try it yourself).
- Logo 2 does not distort at 400% and would print well, however if made any larger would also distort.
- Logo 3 is a vectored logo, meaning it is made up from a mathematical formula as opposed to dots. Because of this it will never distort regardless of zoom.

Tip - If a picture displays clearly on a screen at 4 times the intended printed size it should print clearly.

OK, I understand the problem, what's the solution?

1. Replace - The best solution is to replace the offending logo/picture with one that is a higher resolution or vectored. If your looking for better resolution files good places to check are; you web designer, any old proofs from printers and electronic versions of corporate documents what have been professionally produced. Logos should usually be in an .ai illustrator file or .eps format.

2. Resize - You can sometimes get away by making a picture or logo smaller which can reduce pixilation. Use the four times rule of thumb to check however this isn't ideal.

3. Rebuild - This is by far the most complex and expensive option, pictures unfortunately cannot normally be rebuild. With logos it is often possible to rebuild, however it is notoriously expensive as it requires a lot of design time. If this is your only option we will be happy to provide a quote.

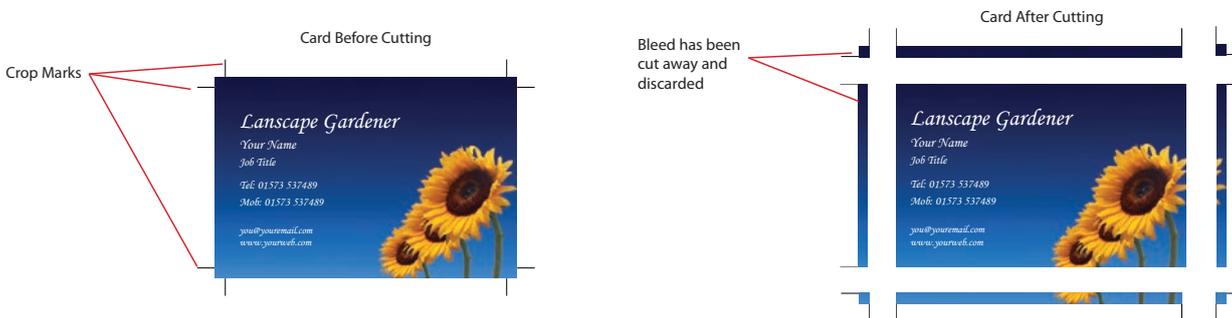
4. Risk it / Regret it - We can print your artwork as it is however we will need your signed consent to go ahead with sending this down to print. Obviously we would not recommend this

Introduction

In this document we will explain what “bleed” is and why it is required. It will also explain how to add bleed to a document that you have designed. The final part of this document shows eight examples of designs without a correct bleed area and instructions for how to correct them.

What is bleed and why is it required?

When graphics continue to the edge of a sheet of paper bleed is required. This is because a commercial printing press cannot print to the edge of a sheet of paper. Instead multiple products are printed on much larger sheets of paper and then cut down to size. Because it is impossible to cut exactly to the edge of your design a little over print on each side is required. This overprint is called “bleed”. Any document that is being professionally printed will require a bleed area and a safe zone providing the print runs to the edge of the document. The diagram below shows a correctly lined up business card with 3mm of bleed and crop marks. The crop marks show the line that the guillotines must cut to. The bleed is the area outside of these marks. Please note we do not require you to put crop marks on you design.



How much bleed do I need?

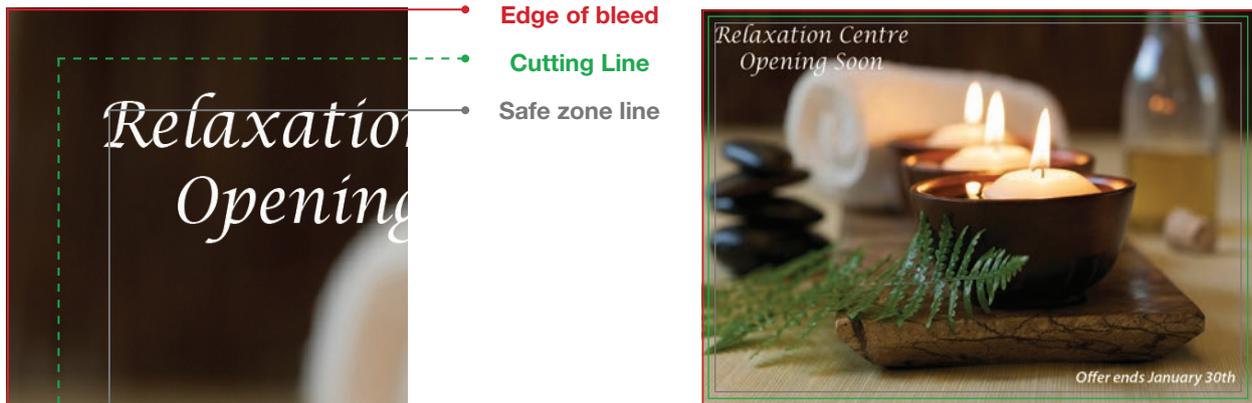
The industry standard is to have 3mm of bleed on each edge and a 3mm safe zone inside. This means that the length of each side will be 6mm longer. For example an A4 sheet when lined up correctly with bleed will be 216mm x 303mm. It will then be cut down to its finished size of 210mm x 297mm. The table provided on page 7 contains the correct dimensions of documents lined up with a bleed area.

What Is the safe zone?

The safe zone is the 3mm inside of the cutting edge in which no text or important information should be placed. Any graphics in this area risk being clipped when cutting. Across the following pages we will show you examples of documents with suitable and unsuitable bleed and safe zones.

Diagram Showing Bleed and Safe zone

In the diagram below you will see that the photograph extends to the edge of the bleed area and there is no text in the safe zone. The correctly lined up flyer is displayed on the right hand side.



Examples of Common Mistakes

This section shows common mistakes with setting up bleed as well as methods for correcting them

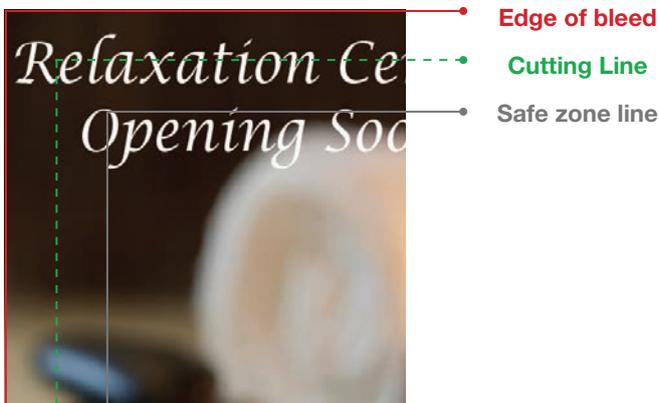
1. No bleed area or white bleed area:

- ⚠ The document has no bleed area, printed "as is" the document will have random white lines on edges as printing and cutting tolerances cannot be compensated for.
- ✅ Extend picture into the bleed area or move text in by 3mm to allow for a bleed area



2. Text is in the bleed area and safe zone:

- ⚠ The document has a bleed area and safe zone however there is text inside the bleed area and safe zone. If cut as is text outside safe zone is likely to be cut off.
- ✅ Move text inward by 6mm. (3mm for bleed area + 3mm for safezone)



3. Text is in the safe zone

- ⚠ The document has a bleed area and safe zone however there is text inside the safe zone. If printed "as is" the text in the safe zone could be cut off or clipped
- ✅ Move text inward by 3mm.



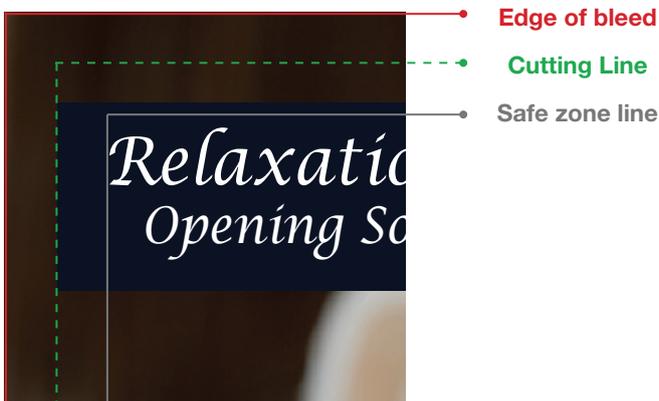
4. The bleed area is a different colour to the edge of the design

- ⚠ The document has a bleed area however it is not a continuation of the background design. Instead it is a grey border. If run as is there are likely to be random grey lines on edges of the product.
- ✅ Make the bleed area a continuation of the background design.



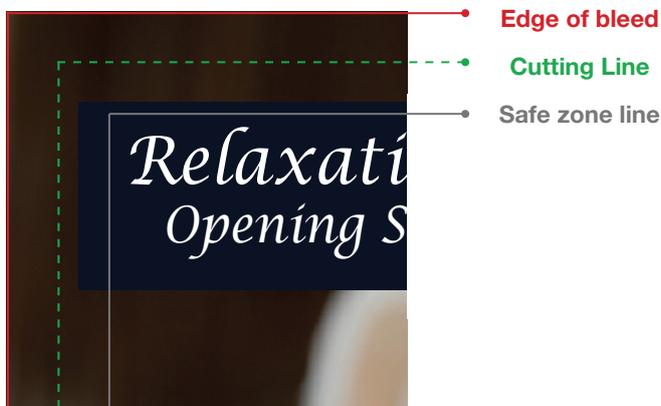
5. Object touching the cutting line does not extent to the edge of the bleed

- ⚠ The black box containing the text touches the cutting line but does not extend to the edge of the bleed area if run as is the could be random brown lines on the edge of the black box.
- ✅ Either extend the black box to the edge of the bleed area or move the edge of the black box to the edge of the safe zone.



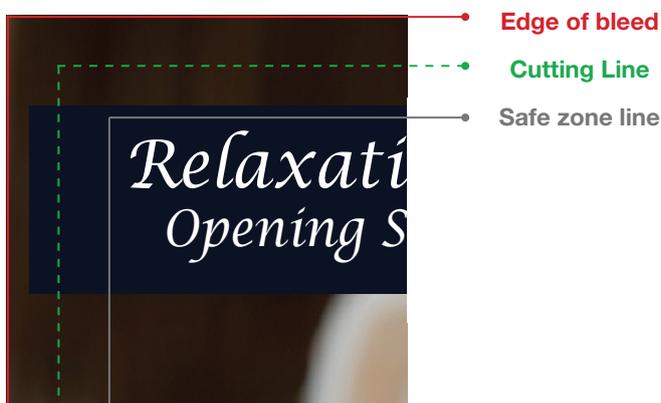
6. Object is halfway between the cutting line and the safe zone line

- ⚠ The black box containing the text touches is halfway between the cutting line and the safe zone line. If run as is the black box may touch the edge on some flyers and not on others
- ✅ Either extend the black box to the edge of the bleed area or move the edge of the black box to the edge of the safe zone.



7. The object does not fully extend to the edge of the bleed area.

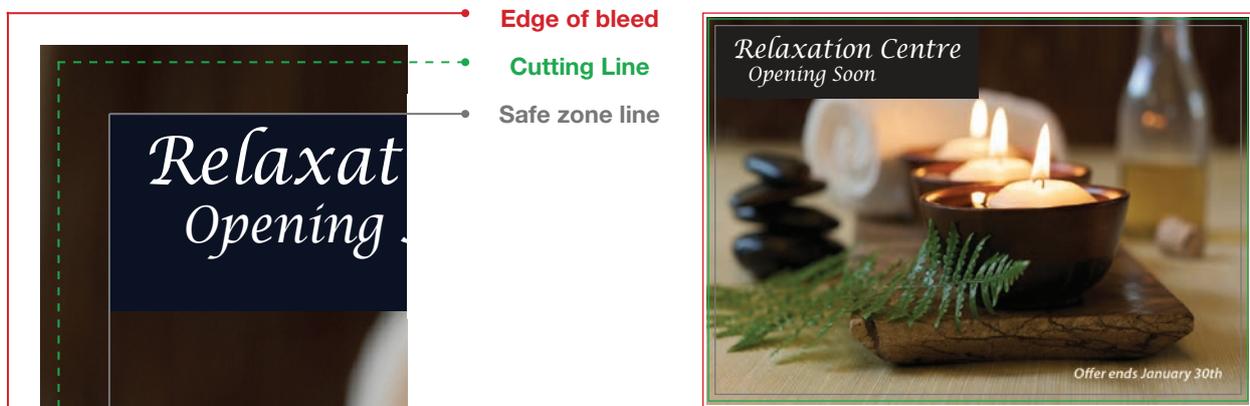
- ⚠ The black box containing the text touches does not extend to the edge of the bleed area. If cut as is some flyers may appear with a thin brown line at the edge of the black box
- ✅ Either extend the black box to the edge of the bleed area or move the edge of the black box to the edge of the safe zone.



8. Not enough bleed

⚠ The design does not have enough bleed area. If cut as is there may be random white lines around the edges of the finished product.

✅ Either extend the background image to fill the bleed area or move the text and objects on the document in by 3mm to create more bleed area.



I am unable to correct my document?

If you are unable to correct your document there are two options.

1. Print with a border - We would be able to print your document with a 6mm white border (or any colour you prefer). We use 6mm is to ensure even borders on each edge.
2. Have the design professionally rebuilt - a professional graphic designer would be able to create a new design for you with a correct bleed area and safe zone. We have an inhouse graphics team who would be happy to provide a quote.

Table showing Sizes and Resolutions

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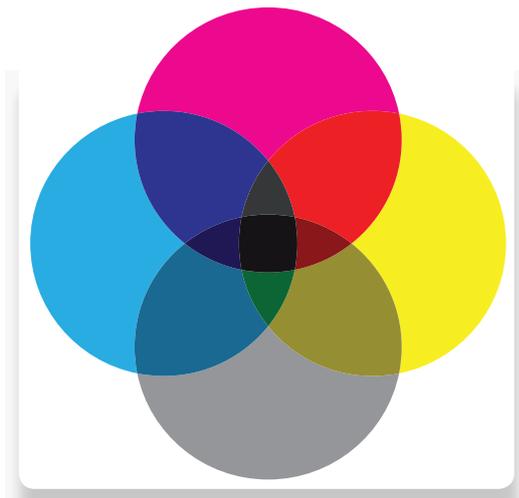
In this guide

This guide details the differences between RGB and CMYK colour gamuts, explaining why CMYK should be used for commercially printed documents and finally showing how to check colour settings in various popular software packages. Please note when ordering that we do not check documents colour set up and automatically convert all colours to CMYK, in certain cases this can cause noticeable colour variation.

1. Colour Gamut Differences - CMYK v RGB
2. Converting RGB files and re-balancing colour
3. Creating Files In CMYK
 - a. Adobe Photoshop
 - b. Adobe InDesign
 - c. Adobe Illustrator
 - d. Microsoft Publisher
4. DOs and DON'Ts - Checking Your Files before sending

1. Colour Gamut Differences

With RGB colours the graphics are made up from Red, Green and Blue, with CMYK the colours are made up from Cyan, Magenta, Yellow and Black.



CMYK colours
are subtractive meaning the starting canvas is white and colours are added to block out parts of the spectrum



RGB colours
are additive meaning that the starting point is a black canvas (i.e. a computer screen) and colours are added to create the final image.

Why Print files need to be CMYK

The RGB colour spectrum is much larger than the CMYK spectrum. i.e. there are colours that can be created in RGB that are not available CMYK. This problem is most apparent with very bright colours such as a fluorescent orange or green. Commercial presses print onto white paper using CMYK colours, in order to get the best results files should be prepared with this in mind. Below shows examples of files submitted in RGB colour that have been automatically converted into CMYK before printing.



RGB



CMYK



RGB



CMYK



Converting files to CMYK before submitting them to print will avoid any surprises with colour when the final product is produced.

2. Converting RGB files to CMYK and re-balancing colour

Using software such as photoshop is possible to readjust the colour balance after conversion to more closely match the intended colour output. If using RGB elements i.e. images in the design stage it is worth converting the elements into CMYK and rebalancing the colours during the design process.



RGB - Original image to be used.
(Notice the vibrancy of the blues)

CMYK - Colours are converted
straight to CMYK

CMYK - Colour levels are adjusted to
match in photoshop.

3. Creating Files In CMYK

When designing any file it is important to set up and design the document in CMYK colour. This will save any problems in trying to adjust colours afterwards which can be very difficult if not impossible. Not all software is able to create files in CMYK colour mode. For example Microsoft Word and Powerpoint are only able to create documents in RGB which must be converted before printing. If you send us a native Word or Powerpoint files we will convert them into a CMYK pdf and will send a proof for checking.

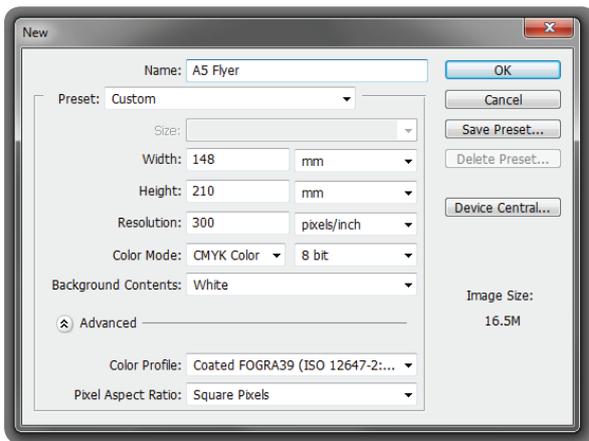
- Software shown in guide
- a. Adobe Photoshop
 - b. Adobe InDesign
 - c. Adobe Illustrator
 - d. Microsoft Publisher

Other software

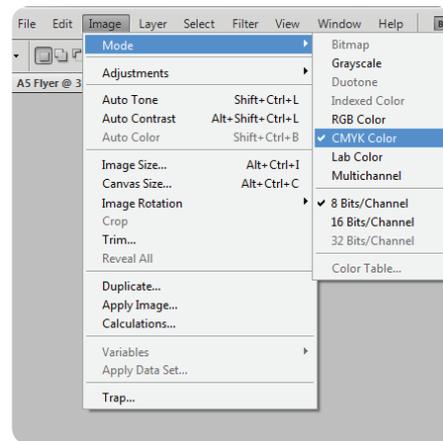
The software shown above represents the most commonly used desktop publishing software for creating print files however documents can be created in many other packages. If using other software key settings are as follows; Colour mode CMYK (Sometimes called process colours). Colour profile: Fogra 39 (ISO 12647-2:2004). Where possible export as a PDF/x-1a:2001

a. Adobe Photoshop

Colour settings in photoshop are determined when the document is created, the screen below shows the correct colour settings. You can also check colour settings when a document is open by clicking on image, then mode as shown by the screen on the right.



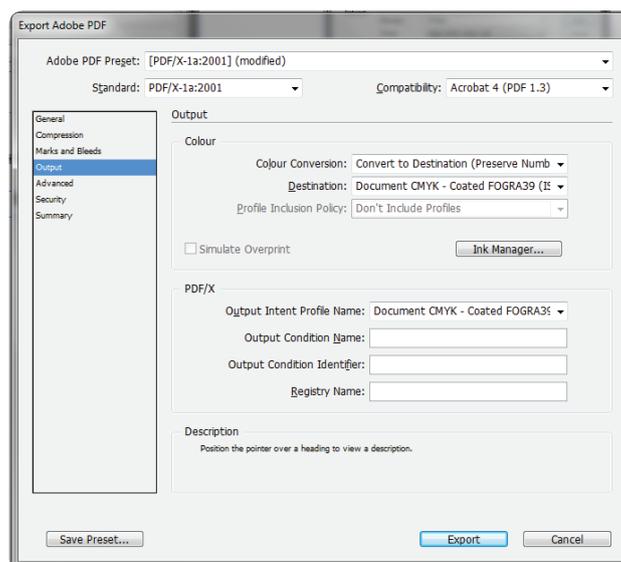
When creating a document set to CMYK



Checking when document is open

b. Adobe InDesign

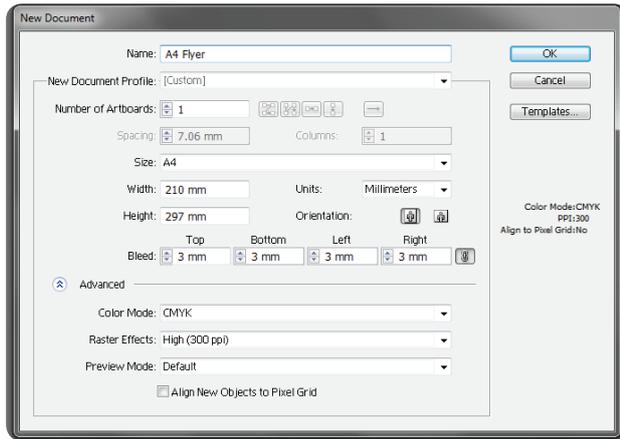
With inDesign the colours are converted when the file is exported to pdf. Selecting pdf/x-1a:2001 preset will ensure that the document is CMYK.



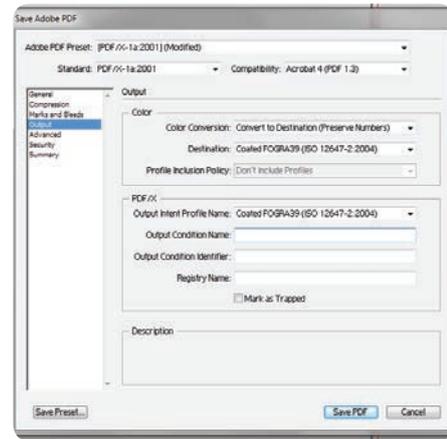
When exporting select pdf/x-1a:2001 preset

c. Adobe Illustrator

In adobe illustrator the colour mode is set when the document is created. When saving as a pdf select pdf/x-1a:2001 from the drop down presets list.



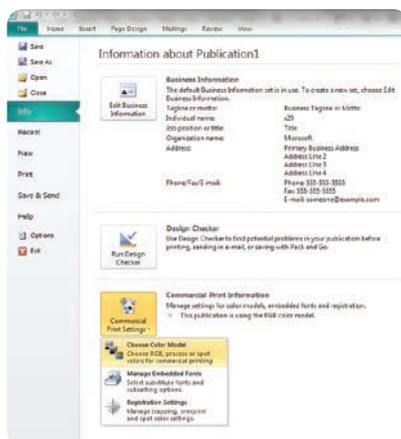
When creating the document select CMYK in the colour mode.



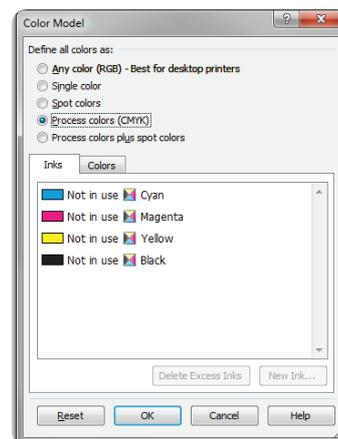
When saving the document as a pdf select pdf/x-1a2001 preset

d. Microsoft Publisher

When the document is open click file - info - commercial print settings - choose colour model. This will allow you to set the colour mode that you would like the document to be set up in.



From the file menu select "choose colour model"

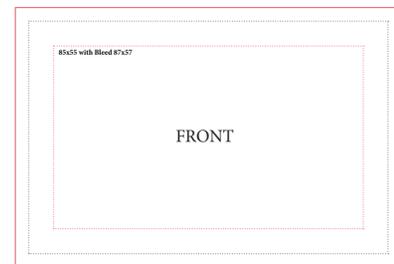


Select "Process colours (CMYK)"

4. DOs and DON'Ts - Checking Your Files before sending

Finally, a couple of quick pointers to help you understanding the issue and assist in checking.

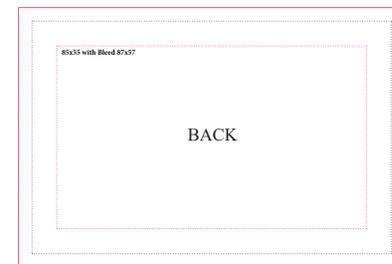
- DO check proofs on screen using a colour calibrated monitor (if possible). Be aware that with uncalibrated screens colours will vary from monitor to monitor.
- DO print samples using a commercial proof printer ensuring the target profile is set to Fogra 39.
- DO use the Adobe Acrobat Pro Output Preview tool to check how the file will look when output to Fogra 39.
- DO use printed CMYK colour swatches to check colours if unsure.
- DO ask for a printed sample if you are unsure of your document's colour setup. Samples cost £10 and can be ordered by calling the office. Turnaround is one working day for production + one working day for delivery.
- DON'T check colours against desktop printer samples as their profiles will generally try to emulate RGB colours as opposed to printing the true CMYK colours.



— RED is your Bleed area size 3mm
- - - - - BLACK is your Finished/ trimmed size
- - - - - PINK is your Text Limit/quiet Border

Artwork Specifications

- Artwork required as high resolution PDF, TIFF or JPEG file
- 3mm Bleed around artwork
- CMYK Only

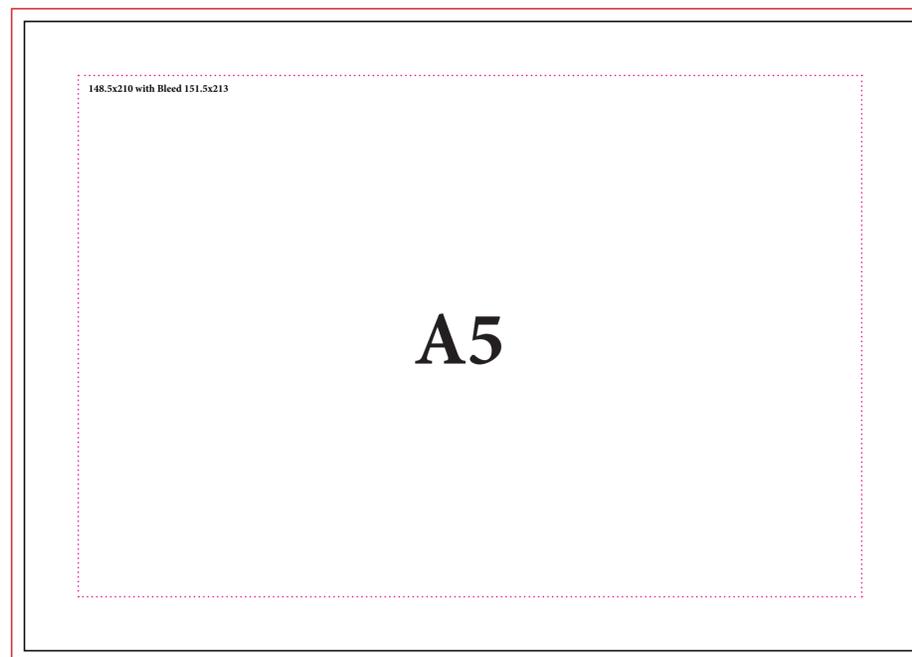


— RED is your Bleed area size 3mm
- - - - - BLACK is your Finished/ trimmed size
- - - - - PINK is your Text Limit/quiet Border

Artwork Specifications

- Artwork required as high resolution PDF, TIFF or JPEG file
- 3mm Bleed around artwork
- CMYK Only

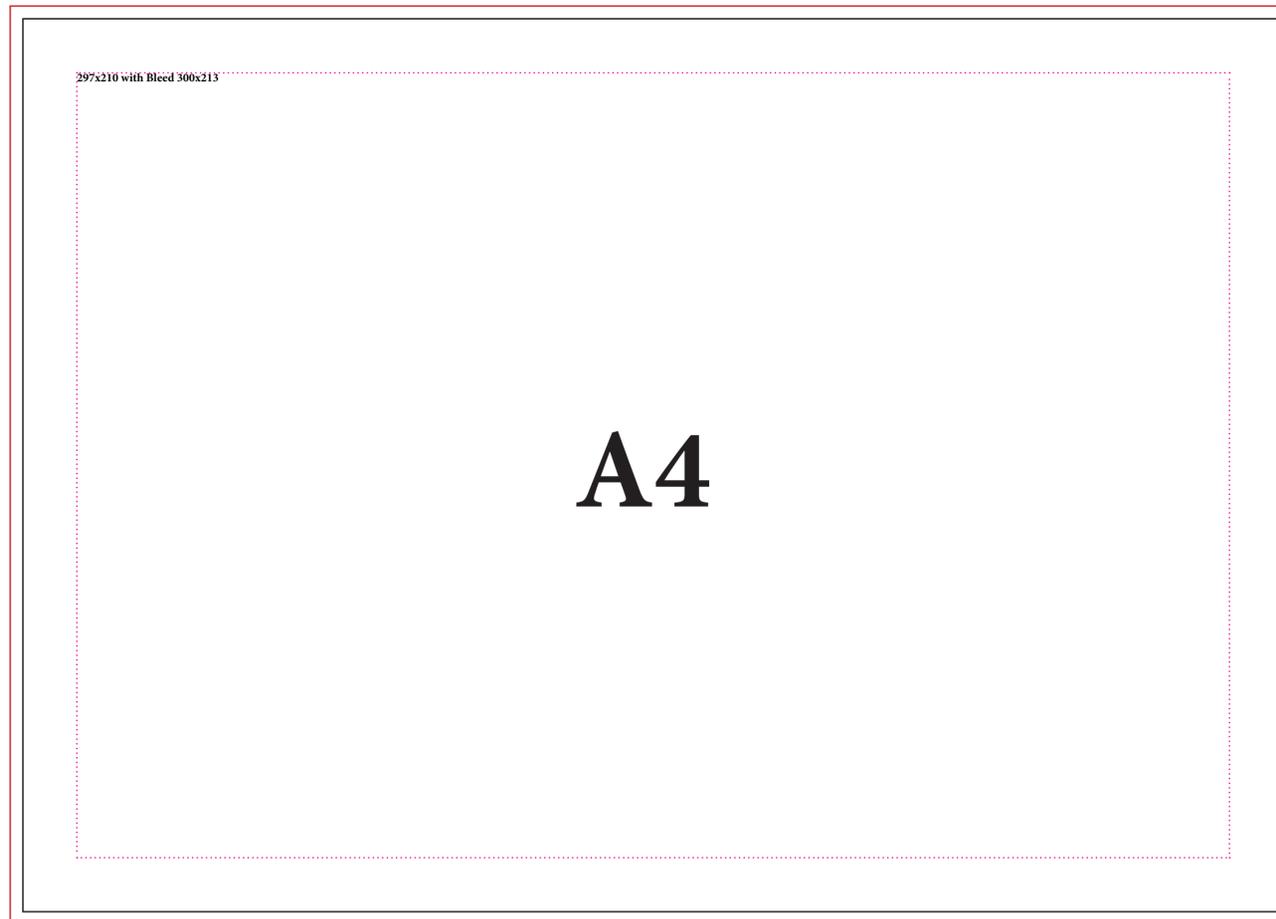




— RED is your Bleed area size 3mm
..... BLACK is your Trimble/Finished size
..... PINK is your Text Limit/quiet Border

Artwork Specifications

- artwork required as high resolution PDF, TIFF, or JPEG file
- 3mm bleed around artwork
- CMYK Only

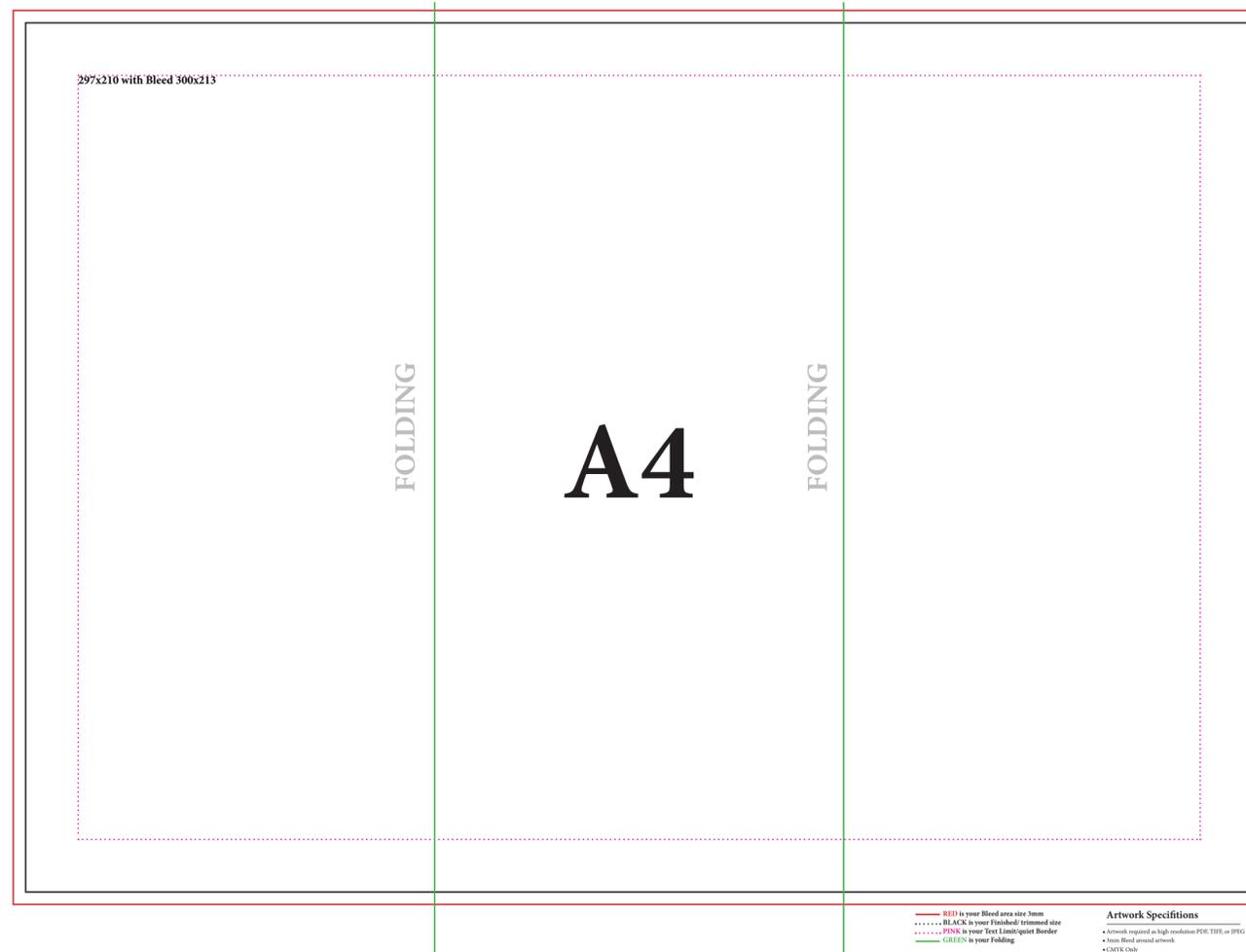


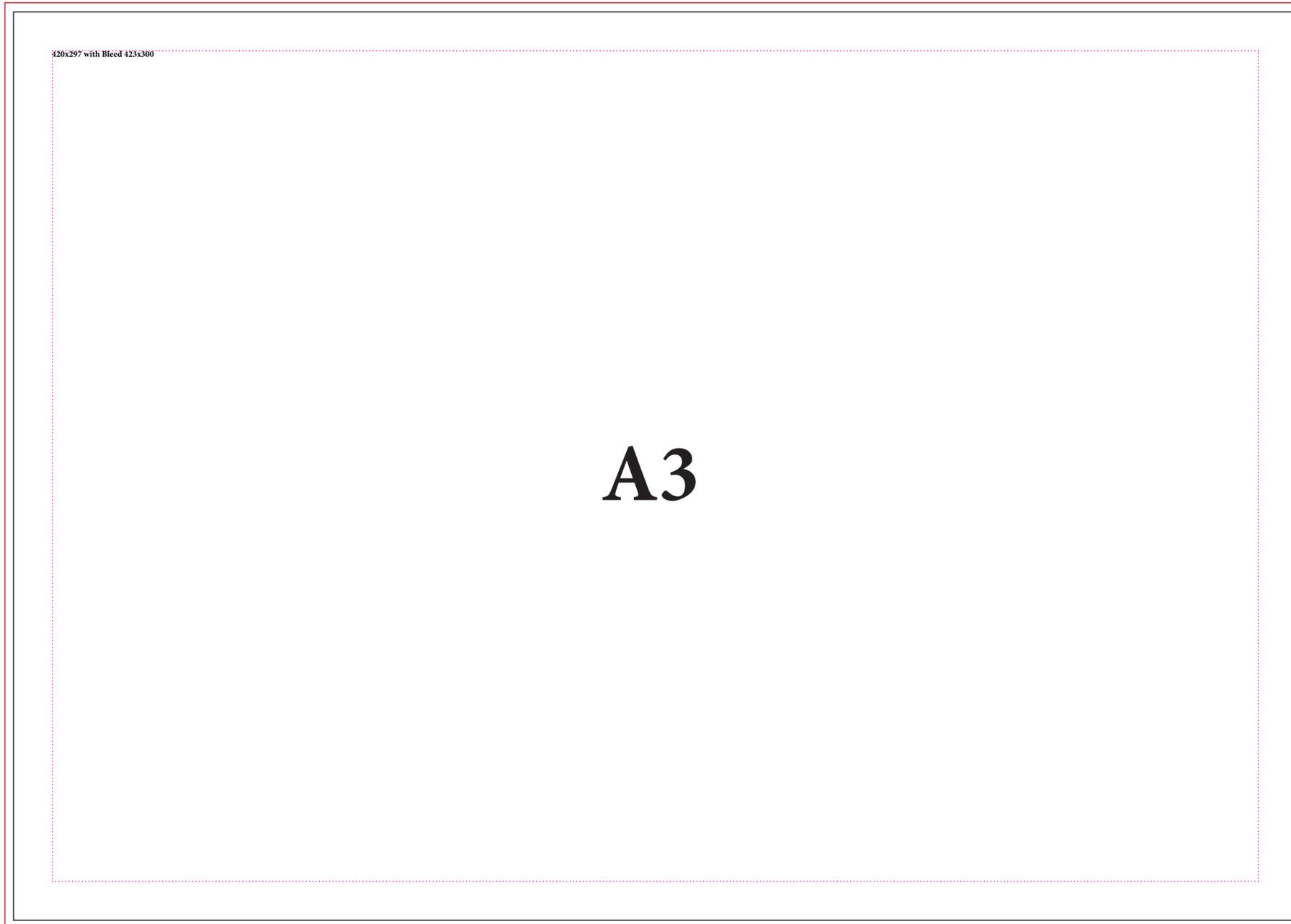
297x210 with Bleed 300x213

A4

— RED is your Bleed area size limit
- - - BLACK is your Finished trimmed size
- - - - - PINK is your Text Limit/quiet Border

Artwork Specifications
• Artwork required as high resolution PDF, EPS or JPEG file
• 3000 Pixel/centimetre artwork
• CMYK Only



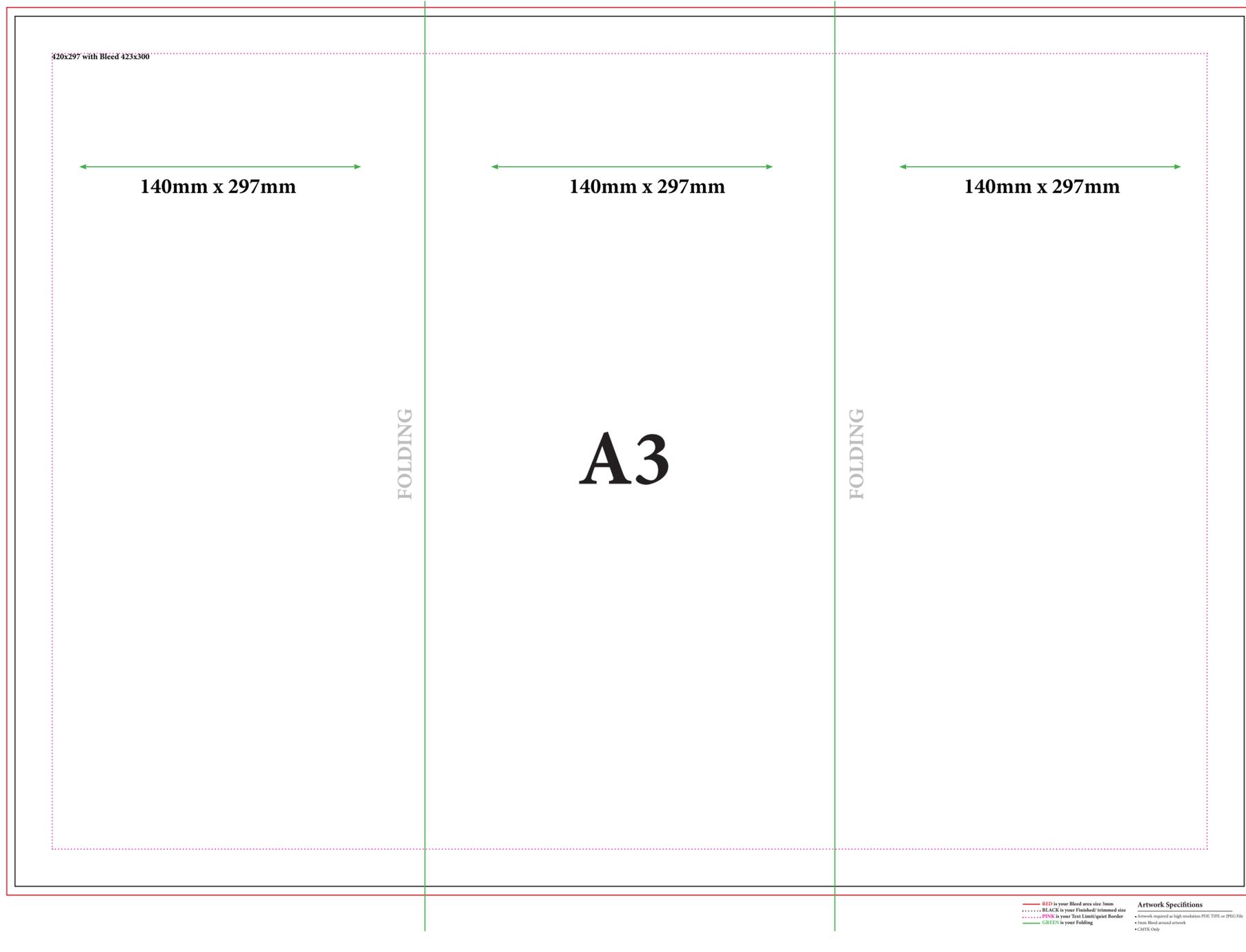


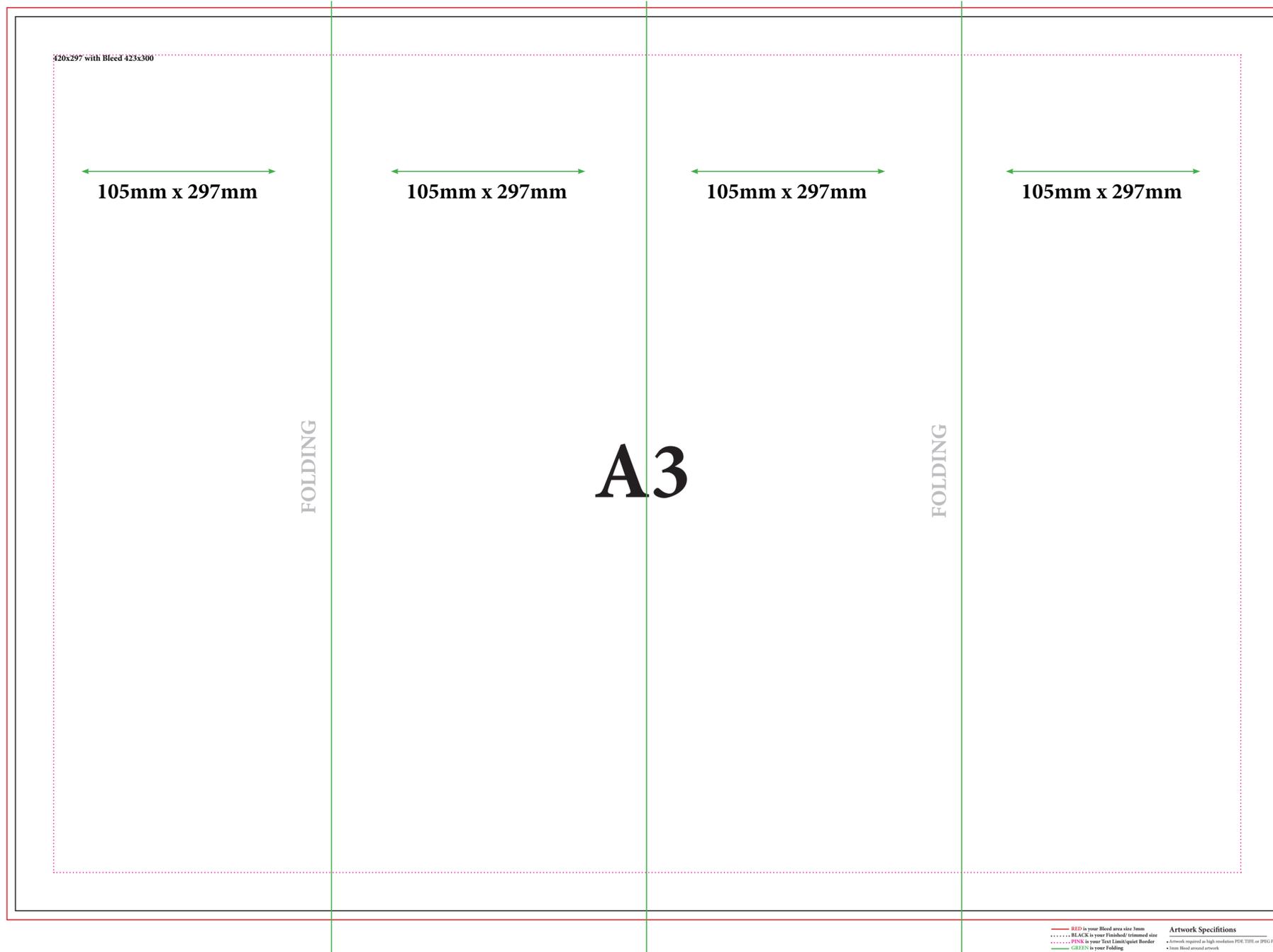
A3

420x297 with Bleed 423x300

— RED is your Bleed area size 3mm
..... BLACK is your Trimmed/trimmed size
..... PINK is your Text Limit/quiet Border

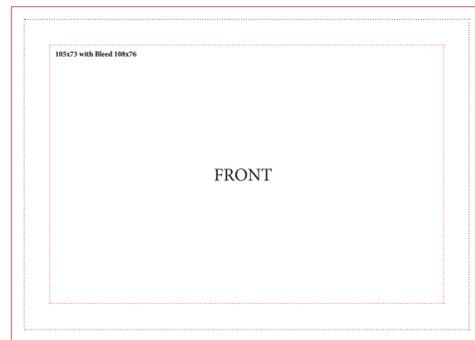
Artwork Specifications
• Artwork required at high resolution PDF, TIFF or EPS File
• 3mm Bleed around artwork
• CMYK Only





RED is your Bleed area size 3mm
BLACK is your Finished/Trimmed size
PINK is your Text Limit/Border
GREEN is your Folding

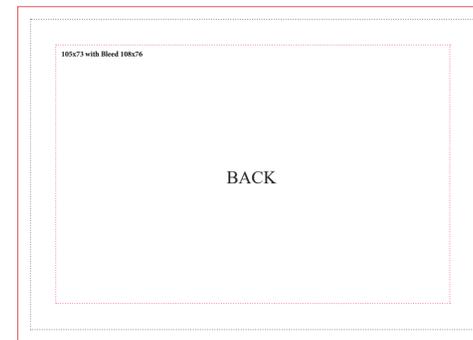
Artwork Specifications
• Artwork required at high resolution PDF, TIFF or EPS
• 3mm bleed around artwork
• CMYK Only



— RED is your Bleed area size 3mm
- - - - - BLACK is your Finish/bleed/trimmed size
- - - - - PINK is your Text Limit/quiet Border

Artwork Specifications

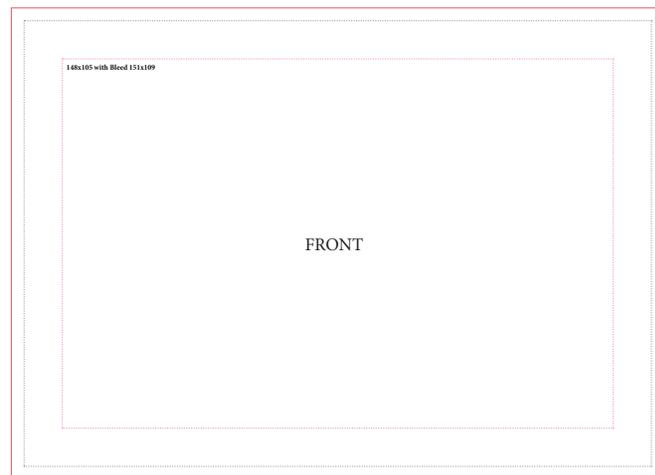
- Artwork required in high resolution PDF, TIFF, or JPEG file
- 3mm Bleed around artwork
- CMYK Only



— RED is your Bleed area size 3mm
- - - - - BLACK is your Finish/bleed/trimmed size
- - - - - PINK is your Text Limit/quiet Border

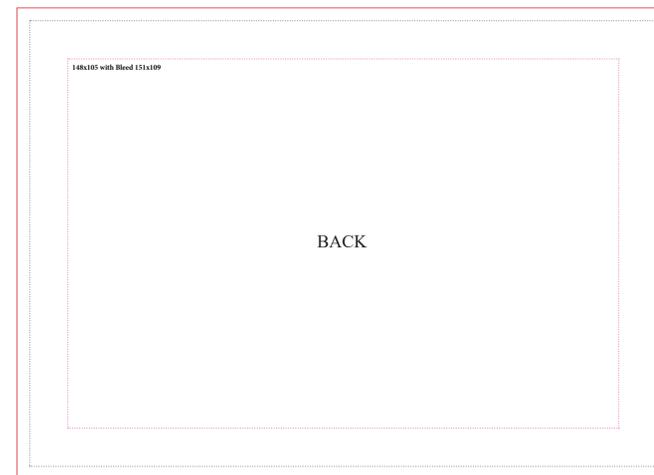
Artwork Specifications

- Artwork required in high resolution PDF, TIFF, or JPEG file
- 3mm Bleed around artwork
- CMYK Only



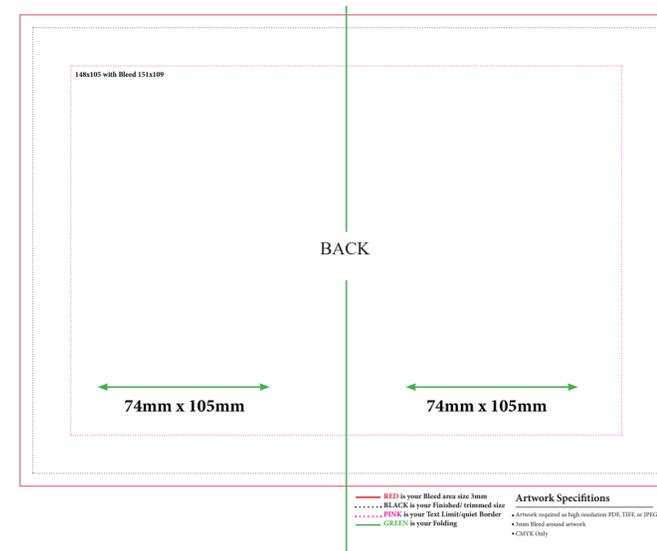
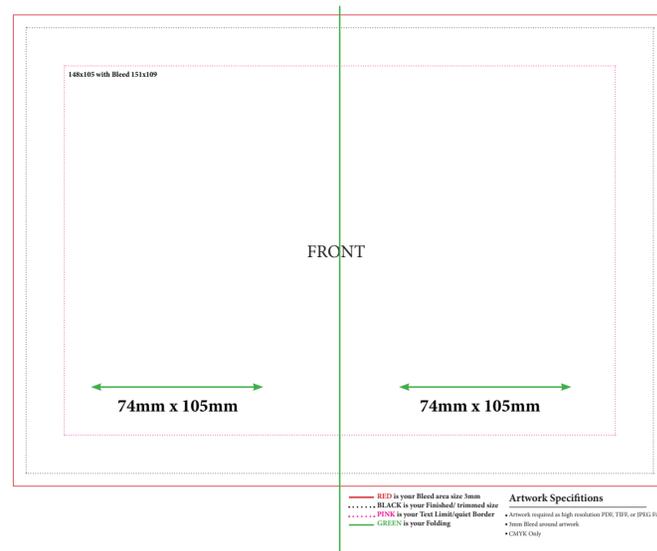
— RED is your bleed area size limit
..... BLACK is your Finish/ trimmed size
..... PINK is your Text Limit/quiet Border

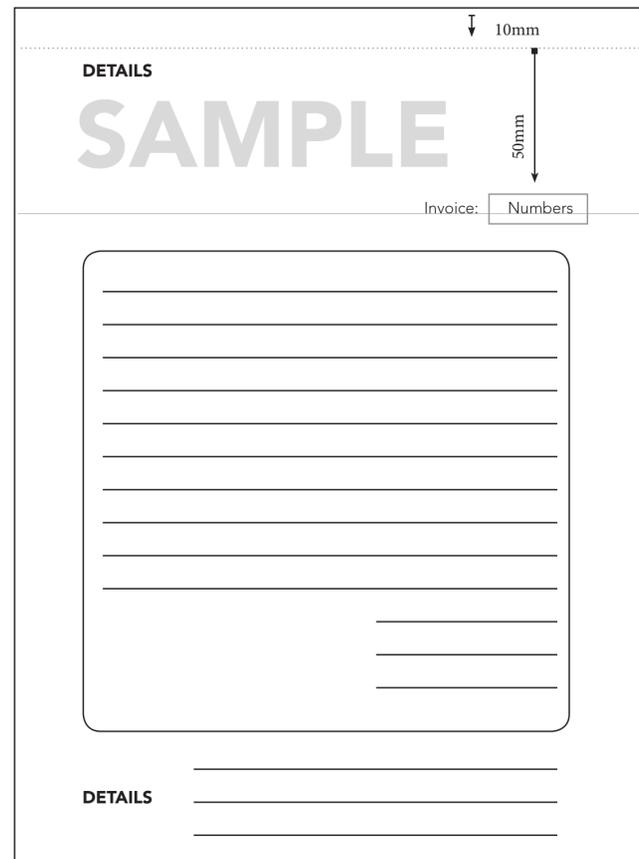
Artwork Specifications
• Artwork required in high resolution PDF, TIFF or JPEG file
• Trim Bleed around artwork
• CMYK Only



— RED is your bleed area size limit
..... BLACK is your Finish/ trimmed size
..... PINK is your Text Limit/quiet Border

Artwork Specifications
• Artwork required in high resolution PDF, TIFF or JPEG file
• Trim Bleed around artwork
• CMYK Only





The diagram illustrates the layout of an A5 invoice template. It features a header section with the word "SAMPLE" in large, bold, grey letters. Above "SAMPLE" is the word "DETAILS" in a smaller font. To the right of "SAMPLE", there are two vertical dimension lines: one indicating a height of 10mm for the top margin, and another indicating a height of 50mm for the "SAMPLE" text area. Below "SAMPLE" is a small box containing the text "Invoice: Numbers". The main body of the invoice is a large rounded rectangle containing several horizontal lines for text entry. At the bottom left of this main body, the word "DETAILS" is written above three horizontal lines. The entire template is enclosed in a thin black border.



