PREPARING FILES FOR PRINT
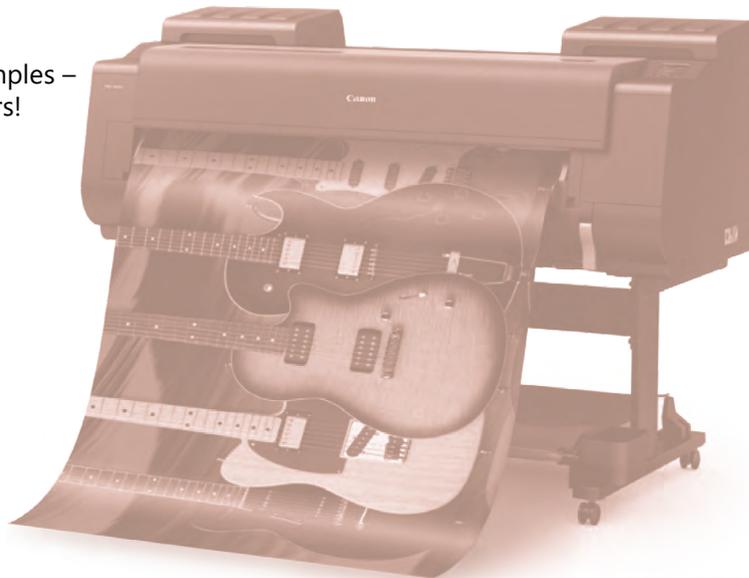
USEFUL TIPS FOR SERVICE USERS

Sussex
Estates and Facilities

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INTRODUCTION

At the Print Unit we receive large numbers of digital files for printing from customers, in a wide range of formats. Often, they have not been set up is a way that allows us to print them easily, and we have to spend a lot of time working on them to make them print-ready. Common problems include:

✗ DOCUMENTS ARE THE WRONG SIZE

✗ TEXT IS TOO NEAR OR FLOWING OFF THE EDGE OF THE PAGE

✗ IMAGES ARE NOT PRINT QUALITY

✗ WE ARE UNABLE TO OPEN THE SUPPLIED FILE

These are a few examples – there are many others!

These guidelines are designed to help customers create print-ready documents and artwork that require minimal intervention from us in order to print as intended, and to minimise the risk of common problems that arise when printing digital files.

BRANDING

The University of Sussex has established a set of guidelines on how university communications should be correctly branded.

This guide is not intended to provide guidance on branding. For information on the Sussex brand, visit:

www.sussex.ac.uk/brand

PDF
PORTABLE DOCUMENT FORMAT

WE RECOMMEND PDF AS THE MOST RELIABLE FILE FORMAT FOR SUBMITTING ARTWORK FOR PRINTING AND ENCOURAGE CUSTOMERS TO USE IT EVERY TIME.

PDF is the industry standard file format for submitting artwork for printing. It generates relatively small (and therefore 'portable') files, and when used correctly it ensures that all your graphics and fonts are properly embedded so they will print correctly no matter what computer they are printed from.

Most programs will allow you to **Save As PDF** or **Export to PDF** directly from the application, and this is a trustworthy approach in most cases for everyday printing (reports, presentations, leaflets, handouts, etc.).

For **publication quality** (brochures, publicity materials, corporate communications) it can be useful to have a bit more control over the PDF settings. In **Adobe Creative Suite** this is available in the **Export** utility within the application (**InDesign**, **Illustrator**, **Photoshop**). If you have access to **Acrobat Pro** then you have the option of **printing to PDF** from any application, as you would to any

desktop printer or multifunctional device (MFD). You can simply *Cntrl+P* and select Adobe PDF from the drop-down list of available printers.

When creating a PDF for print, it is sensible to select the highest available quality settings. Select **High Quality Print** or **Press Quality** and make sure the output resolution is **300dpi** (dots per inch) or more. Avoid using **Screen Quality** or **Smallest File Size** as these will not generate a PDF that is suitable for printing.

You should also make sure you **Embed All Fonts** to ensure that all your text prints out correctly, especially if you have used non-standard fonts which we might not have ready access to.

USING MICROSOFT OFFICE

Most of the files we receive from customers originated in the Office suite of applications (Word, Powerpoint, Excel or Publisher), simply because these are the programs that most of our customers have access to and are familiar with. Documents created in these applications are fine for most everyday printing, but they are not designed specifically to create documents which are print-ready. **Publisher** is Microsoft's attempt at a DTP application but in our opinion it is a poor relation to InDesign and does not have the level of functionality necessary for the task!

Most Office documents will require some intervention from us to make them print-ready, but if you follow these tips it will make our task easier and make it more likely that your job will print correctly, first time.

PAGE SET UP

Make sure your document is set up at a standard UK page size before you begin. In **Word**, make sure your page is set up at A4 or A3 size, **not** Letter size (which is different from A4!).

In **Powerpoint**, the default page size is **Screen size** because Powerpoint is primarily designed for creating on-screen slide shows, **not** printed documents. **So your first job when using Powerpoint to create documents for printing is to set the correct page size:** select **Design** from the main menu, then **Slide Size**, then **Custom Slide Size** and enter the correct dimensions for the page size you want to use.

We can print non-standard sizes if required (up to A0), but you will usually need to set your document up to a standard **A-series size**. The A-series of paper sizes is shown in the table below.

PAPER SIZE	DIMENSIONS
A6	10.5cm x 14.8cm
A5	14.8cm x 21.0cm
A4	21.0cm x 29.7cm
A3	29.7cm x 42.0cm
A2	42.0cm x 59.4cm
A1	59.4cm x 84.1cm
A0	84.1cm x 118.9cm

MARGINS

We can print your document edge-to-edge, but we will need to skim a bit off at the edges when we trim it to size – so it's important to make sure that you don't have any important text or graphics right on the edge of the page that might get cropped off. **We recommend you leave a margin of at least 5mm** between the edge of the page and any important content you need to retain.
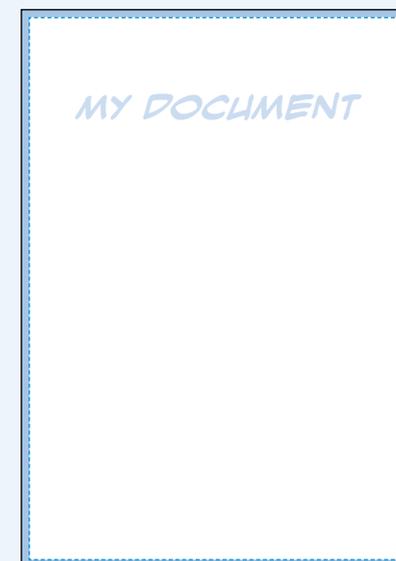
PAGE BREAKS

In **Word**, text reflows automatically from one page onto another, which can result in issues like section headings appearing at the bottom of the page with no content beneath them. This can easily be avoided by inserting **page and section breaks** where appropriate, instead of just hitting *Return* until you reach a new page.

FONTS

It is always sensible to stick to standard fonts like **Arial** and Times New Roman as pretty much all PCs ship with these fonts installed. The standard fonts for University of Sussex publications are **Franklin Gothic** and Baskerville Titling and these will work fine too, if you have them!

SAFE MARGINS

MY DOCUMENT

The **black line** shows the edge of the page you are going to print.

The **dotted line** shows the edge of the 'safe' area – all your important content should be kept within this area.

The **blue shaded area** shows the margin. You can have a background colour or image in this area, but important content should remain outside it so that it doesn't get cropped off when we trim the document to size. The margin width should be **5mm** on all sides.

If you use a non-standard or unusual font there is a good chance that we will not have it pre-installed on our PCs and we won't be able to print it correctly. Unfortunately there is no easy way for us to know whether you have used a font which we don't have – Word will simply substitute an alternative font, and we won't know anything has gone awry until we receive your complaint!

CLIP ART AND WEB GRAPHICS

Avoid using **clip art**, **logos** or **images** you have downloaded from the internet unless you are certain that they are of good enough quality to print cleanly. **Screen resolution** (72dpi) is much lower than **print resolution** (300dpi), so they might look fine on screen but there is a good chance that they will look very poor when they are printed. They will look **even worse if you enlarge them** (for example if you are using them on a poster) so this is best avoided!

It's also worth remembering that images found on the internet may be subject to **copyright restrictions** so using them may put you at risk of copyright infringement. Beware!

GOLDEN RULE

Always submit your publication in PDF format.

This will minimise the risk of problems when we print it.

USING ADOBE CREATIVE SUITE

INDESIGN

InDesign is part of the **Adobe Creative Suite** and is the industry standard desktop publishing (DTP) application, designed specifically to create documents suitable for commercial printing. It works alongside a family of graphics and imaging programs in the suite (e.g. **Illustrator** and **Photoshop**): the graphics programs allow you to create and/or manipulate graphics and images, and InDesign allows you to organize the graphics and your text onto the printed page.

It is possible to set up your publication entirely within Illustrator or Photoshop, but InDesign gives the best level of control over your layout.

InDesign allows you to factor in print-specific settings which are not available in standard office software, such as **bleeds** (which accommodate edge-to-edge printing) and **printers' marks**. You can both print and export to PDF from InDesign with a high level of control over the output file, and we recommend you use this approach whenever possible.

BLEEDS

A **bleed** is where an image or background colour is intended to print right to the very edge on one or more sides of the page. InDesign (for example) allows you to set up
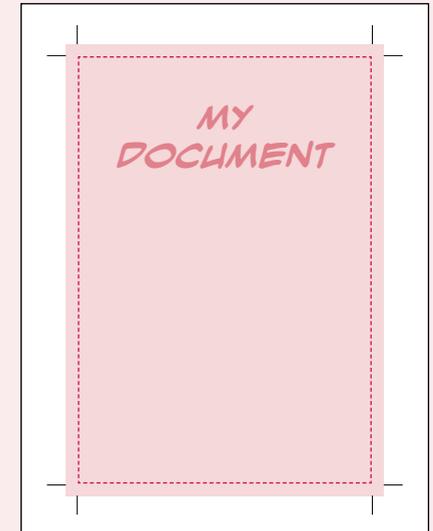
your page size with bleeds at the **Document Setup** stage. If your publication has bleeds you need to make the object that is printed to the edge **overlap the edge of the page by at least 3mm**. We will print the publication on a sheet of paper which is larger than the finished document size, and then trim off the excess. The extra 3mm bleed gives us a bit extra to cut into, ensuring that the finished publication is indeed printed edge-to-edge, without leaving any visible white border.

PRINTERS' MARKS

Printers' marks don't appear on the finished publication but are used to assist the printer in setting up the print job. There are several different printers' marks available in Adobe Creative Suite: crop marks, bleed marks, registration marks and colour bars can all be included when you print or export to PDF. In practice, the only printers' marks we really need are **crop marks**. These show us where the edge of the finished page should be, so we know where to cut when we trim the document to size.

The diagram on the right illustrates (not to scale) how a publication should be set up in Adobe Creative Suite to allow for bleeds and crop marks.

BLEEDS AND CROP MARKS

MY DOCUMENT

The **white rectangle** is the oversized sheet onto which the page is printed.

The **dotted line** shows the edge of the page after printing and trimming to size. *(NB: should not appear on the artwork!)*

The **pink area** shows the area that is printed, including a **bleed** on all sides. Standard bleed width is **3mm**.
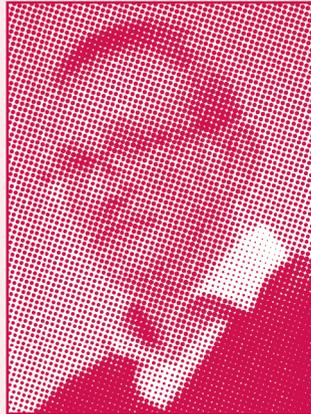
The **marks at each corner** are the **crop marks**, showing the printer where to cut.

PHOTOSHOP AND IMAGES

If you are creating your publication in **Photoshop** it is very important to set up your file at the correct **resolution**. Photoshop generates files that are essentially **raster images**, made up of a finite number of pixels (or dots). The resolution of the print file is the number of pixels there are per inch (hence DPI – dots per inch). The print quality of your publication increases the more dots per inch there are. Conversely, if there aren't enough dots per inch, the print quality will be poor.

For **poster quality**, the minimum resolution required is **150dpi**, whatever the final size of your poster is going to be. For **publication quality** the resolution should ideally be **300dpi**. The default resolution in Photoshop is **72dpi**, which looks fine on screen but is no good for printing – so you need to set up the resolution manually when you start to create your document.

The same principle applies to any images you use in an **InDesign** publication. If you are using picture files they need to be the correct resolution – 150dpi for posters, 300dpi for other publications – **at the size they are being printed**. So if you want to print an image at A4 size on a poster, it needs to be 150dpi at A4 size. If the image you are using is 150dpi but A6 size, **then the quality isn't good enough**: when you scale it up to A4 the resolution will drop to 75dpi because you've got the same number of dots spread over double the area.

ENLARGING RASTER IMAGES

The more you enlarge them, the lower the effective resolution becomes!

RASTER IMAGE SIZES FOR PUBLICATION PRINT QUALITY

Print size	Approximate dimensions (cm)	Minimum picture size (pixels)
A6	10.5 x 15	1000 x 1500
A5	15 x 21	1500 x 2000
A4	21 x 30	2000 x 3000
A3	30 x 42	3000 x 4200

RASTER IMAGE SIZES FOR POSTER QUALITY

Print size	Approximate dimensions (cm)	Minimum picture size (pixels)
A2	42 x 60	2500 x 3500
A1	60 x 84	3500 x 5000
A0	84 x 120	5000 x 7000

The minimum **recommended** raster image sizes (in pixels) for printing at poster or publication quality on standard A-series sizes is shown below left. You don't **have** to stick to these sizes every time – they are just for guidance – but if you use smaller sizes then be aware that the print quality will be lower!

SUPPLYING A PHOTOSHOP FILE FOR PRINTING

It is generally not advisable to submit native Photoshop (**.psd**) files for printing as the file size tends to be enormous!

If you have created your document in Photoshop, you can **Export to PDF** or use the **Save As** function to save your document as an image file (e.g. **.jpg**). **First, make sure you save a copy of your .psd file in case you need to make changes to it later.** Then go to the **Layer** menu and select **Flatten Image**. This will rasterize your text elements and compress all the Photoshop layers into one. Then **Save As JPG** at **Maximum quality**. This converts the .psd file to a non-editable picture file which will remain stable when we print it.

SUPPLYING AN INDESIGN FILE FOR PRINTING

You can supply native InDesign (**.indd**) files to us for printing **but this is not recommended**. If you do, you need to remember that in addition to the .indd file, you will need to supply separately:

1. all the **fonts** you have used, and
2. all the **graphics files** (i.e. pictures and logos).

This is often overlooked, but it is important! If you don't supply all the fonts and linked graphics files along with your .indd file, we won't be able to print it correctly. Fortunately, InDesign has a **Package** utility which will gather together all the necessary elements (document, graphics and fonts) and put them in an output folder for you to send on to us for printing.
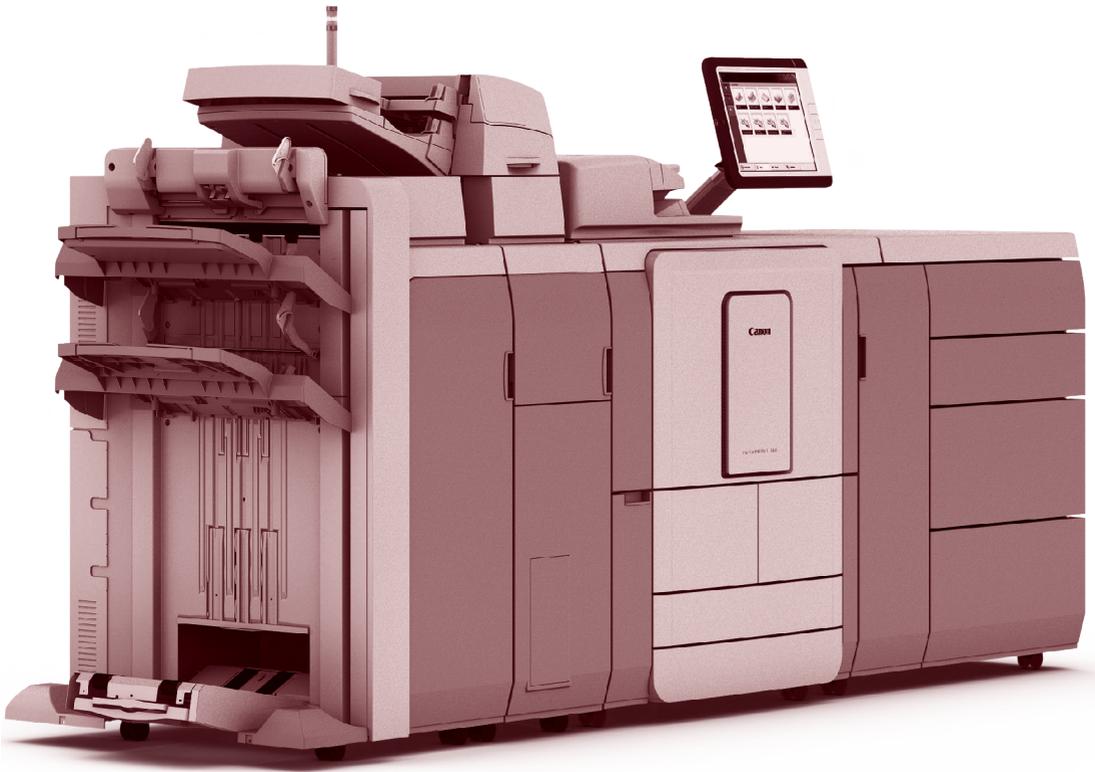
SUPPLYING A PRINT-READY PDF

PDF is a much safer format for sending your print file to us. The simplest way to create your PDF file is using the **Export** utility which is found under the **File** menu in all Creative Suite applications.

Select **Adobe PDF (print)** as the destination file type, then from the **Adobe PDF Presets** menu, select **High Quality Print** or **Press Quality**; in **Marks and Bleeds** check the **Crop Marks** box and set the **Bleed** to **3mm on all sides**.

Refer to the **PDF** section above for more information on creating PDF files.

Print Unit

FIND US

Print and Reprographics Unit
Hastings Building
University of Sussex
Brighton BN1 9RJ

T 01273 678216
E PrintUnit@sef.fm
www.sussex.ac.uk/sef/services/print