DESKTOP PUBLISHING | Printing Terms

EDGE-TO-EDGE PRINTING

- A full bleed or edge to edge printing is when the graphics extend to the physical edge of the paper on all edges.

- A bleed is required on all edges of the publication. Usually commercial printers will achieve an edge to edge look by cropping the paper to size after the print however modern inkjet printers now can print to the actual edge of the paper by over spraying the page, this method however does waste ink.

- Off-set litho printing (the most common commercial method) requires printing on OS (oversized) paper which is then trimmed to size.

BLEED

- If you want a graphic to reach the edge of the paper you need to extend the graphic outside the edge of the publication. This is known as bleed.

- Graphic designers usually add a bleed margin during the page set up and extend items by 3mm or 5mm to achieve a bleed.

- The publication is printed on oversized (OS) paper to enable this additional bleed size. The paper is trimmed to size after printing.

GUTTER

- The vertical space or alley space between column of text is referred to as the gutter.

- It also refers to the inside margins or blank space between two facing pages. In this case the gutter space may need to be adjusted to allow for creep, the movement associated with some book binding methods.

REGISTRATION MARKS

- When off-set litho printing with multiple plates for each individual colour (e.g. CMYK) precise alignment is needed to ensure each plate/colour is printed exactly on top of the others. This is called registration.

- The registration marks (right) are positioned in the margins of each page to help the printer operator to align the colours on the press properly.

- They are trimmed off during cropping.
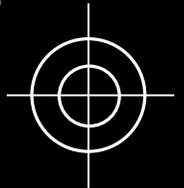
COLOUR CALIBRATION

- Colours will appear duller when printed than to what they look like on screen

- This can cause issues for a designer who may unwittingly make his colours too bright or too warm (monitors are often to blue-ish). In order to avoid this, the monitor should be calibrated to match the printer.

- A colour calibration device is set on the screen which reads the colours and brightness of the display and then adjusts the colour settings of the output to match a dataset of colour values.

- Likewise it is important that a printer also bases its colours on the same dataset of colour values – so that both printer and screen match.

- The colour values of a printed sheet can be scanned and checked by a calibration device and then the printer colour data calibrated accordingly.

DOTS-PER-INCH (DPI)

- Refers to the number of dots that can be printed within 1 inch.

- The higher the number of dots (resolution), the sharper and clearer the image.

- For photos to appear crisp and sharp they need to have a resolution of around 300 dpi.

- Many screens only output at around approx. 100 pixels per inch (PPI) so images for screen can have a smaller file size.

PHOTO-REDUCTION

- This refers to the compression of image files to that they are a smaller file size but with limited loss of quality.

- This is useful for images for the web as it allows for quicker load times.

- Photo editing programs reduce file size by removing meta data such as camera model, white balance and photo data and so on.

- This could reduce a file from around 4MB to 1MB relatively easily.

DUPLEXING

- Put simply, it when a printer can print on both sides of a sheet of paper.

- Duplexing is achieved when the printer catches the piece of paper after the first side has been printed on, then flips it and prints again.

CAMERA-READY COPY

- This is the final stage of a publication before it is printed.

- The document will have been exported as either an EPS file or a PDF file; it will be set for the correct colour scheme and will be set to the correct size for printing without any need for scaling.

- Fonts should be set to vector graphics and any raster images should be at least 300 DPI.

PAPER WEIGHT

- Paper is measured in GSM – 'Grams per Square Metre'.

- Low quality sheets have a low GSM value; such as the paper used in a photocopier (approx. 80 GSM). High quality paper has a higher value GSM, such as the paper used to print leaflets/flyers (approx. 130 GSM).

PAPER OPACITY

- Paper opacity describes how much light can pass through a piece of paper.

- Paper with High Opacity is good for duplex printing as not much light can pass through and you are unlikely to be able to see what's been printed on the opposite side.

- Paper with Low Opacity allows light to pass through easily; for example Tracing Paper.

USE OF CALENDARING FOR GLOSSY PRINT

- Calendaring is the process of smoothing the surface of a piece of paper by pressing it between cylinders or rollers.

- This produces a very smooth, uniform surface on the paper, which then makes it suitable to have a gloss coating applied.

- The gloss coating requires a very smooth, flat surface rather than a rough, bumby one.