The Ultimate
Printing Output
Guidebook

Frequently Asked Questions

"Excellent Service // Professional Results"
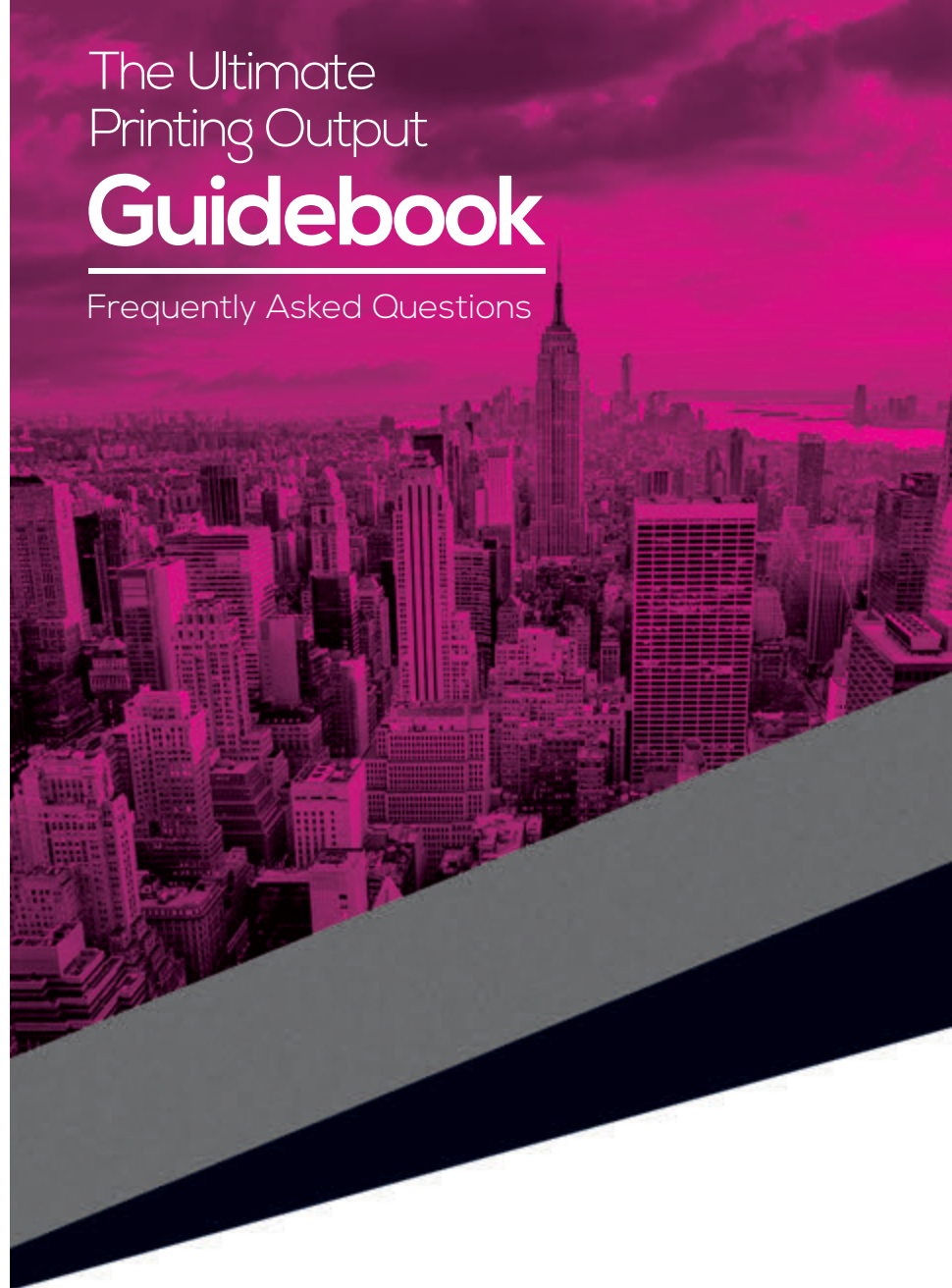
DIGITALCITY MARKETING
PRINTING | GRAPHICS | WEB DEVELOPING | MARKETING

About Us

Digital City Marketing is an NYC printing company that offers premium quality services on offset, digital, large format and specialty printing. When it comes to printing in New York City, we know that businesses and individuals alike need a printer they can rely on. Simply providing exceptional quality isn't always enough. We know you need quick turnaround times, reliability, flexibility, convenience and competitive pricing. That's why since 2008, people throughout the City have been turning to Digital City Marketing for their personal and business needs including same-day and rush printing on our digital presses and printers.

Everything we do is defined by our commitment to quality and the attention to detail that your marketing products deserve. No matter what you need printed, how quickly you need it completed or the size of your printing job, you can rest assured that you are receiving the best printing services in NYC, along with the highest level of customer service. Choose Digital City Marketing as your printer every time and watch your printing make an impact.

PRINT ON AN HP INDIGO WITH LIQUID INK TECHNOLOGY, NOT WITH TONER

GRAPHICS & PRINT PRODUCTION TERMINOLOGY

Bleed: a term that refers to printing that extends beyond the trim edge of your document. The bleed gives the printer a small amount of wiggle room to accommodate paper and design inconsistencies.

Trim: the final size of a product after its unnecessary parts have been cut off or removed.

Live Area: is the area where your art and type should be safely tucked into so they are not trimmed or cut-off.

PDF: (Portable Document Format) is a file format created by Adobe Systems in 1993 for document exchange. PDF is used for representing two-dimensional documents in a manner independent of the application software, hardware, and operating system.

TIFF: (Tagged Image File Format) is a high-resolution loss-less file format that is ideal for saving images for print.

DPI: Dots per inch (DPI) is a measure of spatial printing or video dot density, in particular the number of individual dots that can be placed within the span of one linear inch (2.54 cm). The DPI value tends to correlate with image resolution, but is related only indirectly.

PPI: Pixels per inch or pixel density is a measurement of the resolution of devices in various contexts; typically computer displays, image scanners or digital camera image sensors.

Image Resolution: describes the detail an image holds. The term applies equally to digital images, film images, and other types of images. Higher resolution means more image detail.

EPS: Encapsulated PostScript is a DSC-conforming PostScript document with additional restrictions intended to make EPS files usable as a graphics file format. In other words, EPS files are more-or-less self-contained, reasonably predictable PostScript documents that describe an image or drawing, that can be placed within another PostScript document.

Color Separations: The process of separating full-color photographic transparencies or prints into the four process ink colors: cyan, magenta, yellow, and black (CMYK). Most color separations are now done by computerized scanning of the original image.

Process Color: referred to as process color or four color, is a subtractive color model, used in color printing, also used to describe the printing process itself. CMYK refers to the four inks used in most color printing: cyan, magenta, yellow, and key black.

PANTONE Color: The PANTONE MATCHING SYSTEM is the definitive international reference for selecting, specifying, matching and controlling ink colors.

JPEG (Joint Photographic Experts Group): might be the most common file type you run across on the web, and more than likely the kind of image that is in your company's MS Word version of its letterhead. JPEGs are known for their "lossy" compression, meaning that the quality of the image decreases as the file size decreases. You can use JPEGs for projects on the web, in Microsoft Office documents, or for projects that require printing at a high resolution. Paying attention to the resolution and file size of JPEGs is essential in order to produce a nice-looking project.

PNG (Portable Network Graphics): are amazing for interactive documents such as web pages, but are not suitable for print. While PNGs are "lossless," meaning you can edit them and not lose quality, they are still low resolution. The reason PNGs are used in most web projects is that you can save your image with more colors on a transparent background. This makes for a much sharper, web-quality image.

GIF (Graphics Interchange Format): are most common in their animated form, which are all the rage on Tumblr pages and in banner ads. It seems like every other day we have a new Grumpy Cat or Honey Boo Boo animated GIF. In their more basic form, GIFs are formed from up to 256 colors in the RGB colorspace. Due to the limited number of colors, the file size is drastically reduced. This is a common file type for web projects where an image needs to load very quickly, as opposed to one that needs to retain a higher level of quality.

PSD (Photoshop Document): are files that are created and saved in Adobe Photoshop, the most popular image editing software ever! This file format contains "layers" that make modifying the image much easier to handle. This is also the program that generates the raster file types mentioned above. The largest disadvantage to PSDs is that Photoshop works with raster images as opposed to vector images.

AI (Adobe Illustrator Document): is, by far, the image format most preferred by designers and the most reliable type of file format for using images in all types of projects from web to print, etc. Adobe Illustrator is the industry standard for creating artwork from scratch and therefore more than likely the program in which your logo was originally rendered. Illustrator produces vector artwork, the easiest type of file to manipulate. It can also create all of the aforementioned file types. Pretty cool stuff! It is by far the best tool in any designer's arsenal.

INDD: (InDesign Document) are files that are created and saved in Adobe InDesign. InDesign is commonly used to create larger publications, such as newspapers, magazines and eBooks. Files from both Adobe Photoshop and Illustrator can be combined in InDesign to produce content-rich designs that feature advanced typography, embedded graphics, page content, formatting information and other sophisticated layout-related options.

Raster: images are constructed by a series of pixels, or individual blocks, to form an image. JPEGs, GIFs, TIFFs and PNGs are all raster images. Every photo you find online or in print is a raster image. Pixels have a defined proportion based on their resolution (high or low), and when the pixels are stretched to fill space they were not originally intended to fit, they distort resulting in blurry or unclear images. In order to retain pixel quality, you cannot resize raster images without compromising their resolution. As a result, it is important to remember to save raster files at the exact dimensions needed for the application.

Vector: images are far more flexible. They are constructed using proportional formulas rather than pixels. EPS, AI and PDF are perfect for creating graphics that require frequent resizing. Your logo and brand graphics should have been created as a vector, and you should always have a master file on hand. The real beauty of vectors lies in their ability to be sized as small as a postage stamp, or large enough to fit a football field.

Working with images is a lot more complicated than at first glance. Hopefully this guide has provided a better understanding of the standard file types and which are most appropriate for your project.

Table of Contents

Which program should I use?

These are all great programs that have different purposes. Knowing when to use them can save you - and us - a lot of time and effort. In general, InDesign is a great program to use for anything that has multiple pages. This can mean newsletters or booklets, but it is also great for things like business cards and brochures. Master pages allow you to quickly apply changes to every page in the document without having to individually edit each page. Illustrator, in addition to creating logos and vector drawings, can also be used for layouts. If you are designing anything that has only one page or is only one-sided, Illustrator can be a good option. Photoshop is best used for photos and photo editing. You may use it as layout software if that is all you have available, but it is not as flexible as other programs and files will not be as easy to edit later on.

Adobe Photoshop

- For photographs and rasterized images only.
- Text is best left to other applications like Illustrator or InDesign.
- When using Photoshop, it is NOT recommended to enlarge images because this will result in pixelated images and poor print quality.

Adobe Illustrator

- Illustrator works with vector images, which are based on mathematical formulas. This means images created in Illustrator can be scaled up or down without loss of quality, as can happen with rasterized images in Photoshop.
- Illustrator is great for text that will be used as a design element, or logos.

Adobe InDesign

- This is a layout program that is used to combine text and graphics.
- It is best to compose large areas of text in InDesign rather than Illustrator or Photoshop.
- Place images designed in Photoshop or Illustrator into your InDesign layout to bring everything together and get it ready for print production.

How to convert a PDF from InDesign?

Before creating a PDF from InDesign, please keep in mind:

- **Fonts:** Ensure that all fonts are loaded and active prior to creating your PDF.
- **Image Resolution:** As a rule, all Photoshop images should have a resolution of 300 dpi. Any bitmap should be at 600 dpi.
- **Color Separations:** Run off laser separations to be certain your document will separate correctly.
- **Color Space:** ALL RGB images should be converted to CMYK.
- **Spot Colors:** If you've used Pantone spot colors in your design but do not require them to be printed as spot colors, convert Spot Colors to Process by clicking the Ink Manager button in the Output Menu and checking the "All Spots to Process" checkbox.
- **Color Separations:** Run off laser separations to be certain your document will separate correctly.
- **Bleeds:** Extend all elements that run off the edge of the page an additional 1/8" beyond the final trim size.
- **Document Size:** Create your document at the final size you would like it produced. Avoid building on an oversized layout (for example, don't build a 3.5"x2" rectangle on an 8.5"x11" page if you want a business card). Pay particular attention to panel sizes where one panel may need to be narrower to accommodate a fold (for instance, a tri-fold brochure).
- **Transparency & Drop Shadows:** Set the Transparency Flattener to High Resolution.

Creating a PDF from Adobe InDesign Under the File menu, choose Export, name your PDF file, and choose "Adobe PDF"

What is bleed?

One crucial step when setting up your print documents is to remember to accommodate for bleed. Again, the exact amount may vary from company to company and product to product, but 3mm or 0.25" is a common figure. Bleed is the area around your final document dimensions where your design is extended. This allows for slight inaccuracies when the printed sheets are being trimmed down to size. If the sheet is misaligned slightly, the bleed will avoid leaving a thin white strip of plain white paper down the edge of your design.

Only elements that touch an edge of your design need to extend into the bleed area. Background photos or images should be large enough to fill the entire bleed size (remember bleed area is trimmed off). Make sure your logo and any text elements are placed well away from the edges of the document so they don't get accidentally cropped or look like they're about to fall off the edge. It's often useful to designate a "safe margin" between 5-10mm from the edges using guides. Place all your design elements within this safe zone to nicely balance your artwork on the page.

InDesign: File›Document Setup›Set Bleed To .125" to all sides
Illustrator: Document Setup›Set Bleed To .125" to all sides
Photoshop: Image›Canvas Size›Add .25" to both height and width

BLEED

NO BLEED
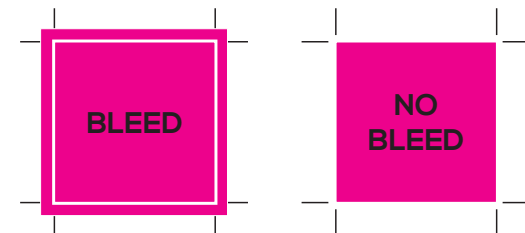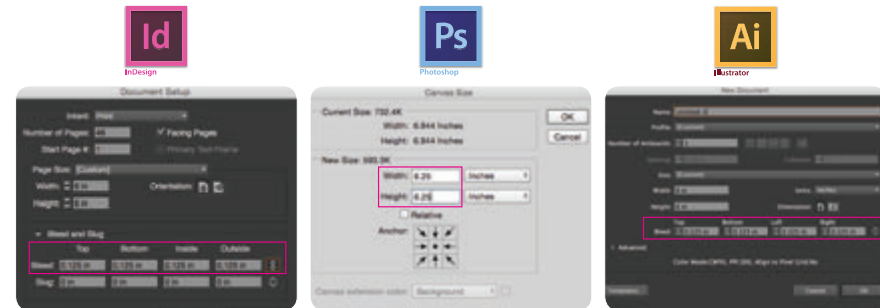
* THE BORDER IN THIS COLOR REPRESENTS THE TRIM LINE

What image resolution should I use?

The standard image resolution for printing is 300 dpi or higher. Files that are lower in resolution have a tendency to not be as clear or sharp. It's important to begin with a high-quality image, which means the highest resolution and image dimensions you can get. When it comes to source images, bigger is better, because you can go down in size, but not up, without losing quality.

DPI stands for "dots per inch" and PPI translates to "pixels per inch." These units of measure are essential for determining if the density of pixels in an image is appropriate for the application you are using.

The biggest thing to note when determining what DPI or PPI you require is if you are using an image for print or web. Websites display images at 72 dpi, which is low resolution; however images at this resolution look really crisp on the web. This is not the case for print. Best practices for printing an image will require it to be no less than 300 dpi. The more dots, the higher the quality of the print (more sharpness and detail).

Don't try to trick the system. A lot of magic can happen in Photoshop, but creating pixels out of thin air isn't one of them. Pulling an image off of the web and trying to get it to fit the dimensions of your print project just won't work. You will end up with a pixelated image that appears stretched and distorted.

72-300 DPI Conversion Chart

WEB 72 DPI (SCREEN RES)	PRINT 300 DPI (HIGH RES)
600x900	2x3
900x1500	3x5
1200x1800	4x6
1500x2100	5x7
1800x2400	6x8
2100x2700	7x9
2400x3000	8x10
3300x5100	11x17
3600x5400	12x18
7200x10800	24x36
10800x14400	36x48
14400x21600	48x72

300 DPI

72 DPI

Low resolution image at 72 dpi, which will look crisp on your monitor, but looks pixelated when printed.

What color mode should my files be for print?

When a user generates graphics on a computer for printing, or wishes to print images from a digital camera, it is a common mistake to assume that the colors seen on the screen will look the same in print. As a result of this mistake, files for printing are often erroneously sent in the Red-Green-Blue (RGB) format. The issue lies in the fact that the computer screen and many photo editing programs show colors in RGB mode, while images are printed on paper in Cyan-Magenta-Yellow-Black (CMYK) format. Sometimes the conversion from RGB to CMYK works without any problems arising, and a printout will look identical to what shows up on the computer. In other cases, there will be noticeable differences between the shades of color. The key to avoiding this potential problem is to convert all graphics to CMYK format during the layout and design phase.

RGB COLOR MODE

RGB is the color scheme that is associated with electronic displays, such as CRT, LCD monitors, digital cameras and scanners. It is an additive type of color mode, that combines the primary colors, red, green and blue, in various degrees to create a variety of different colors. When all three of the colors are combined and displayed to their full extent, the result is a pure white. When all three colors are combined to the lowest degree, or value, the result is black. Software such as photo editing programs use the RGB color mode because it offers the widest range of colors.

CMYK COLOR MODE

Printers print color onto paper using the CMYK color mode only. This is a four color mode that utilizes the colors cyan, magenta, yellow and black in various amounts to create all of the necessary colors when printing images. It is a subtractive process, which means that each additional unique color means more light is removed, or absorbed, to create colors. When the first three colors are added together, the result is not pure black, but rather a very dark brown. The K color, or black, is used to completely remove light from the printed picture, which is why the eye perceives the color as black.
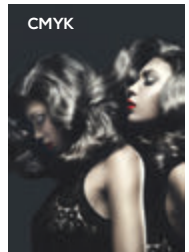
WHY RGB COLORS NEED TO BE CONVERTED?

The RGB scheme has a greater range of colors than CMYK and can produce colors that are more vivid and vibrant. These colors are beyond the range of CMYK to reproduce and will come out darker and more dull in print than what is seen on the monitor or display. Because the RGB color mode has the full range of colors, documents shown in CMYK mode will always show up precisely on-screen. RGB colors, however, will not necessarily appear in print as they do on-screen. To accurately print the document or image, it must be converted from its original RGB format to CMYK. It is possible to do this by using software such as Adobe Photoshop or Adobe Illustrator.

What happens if I convert a grayscale image into CMYK?

Double check the CMYK values of your grayscale. There is a possibility that the color will vary if the file contains values other than K.

To remove all values other than K, go to your Channel Mixer in Photoshop. This is under the Adjustment Layer option. Then select "Monochrome" to make the necessary changes.

CMYK

Grayscale

What is an overprint and how can it affect my file?

Overprint is a process to intentionally overlap inks for a variety of reasons. However, it can create unexpected or undesirable results. Please make sure that this "Overprint" option is turned off before sending your files.
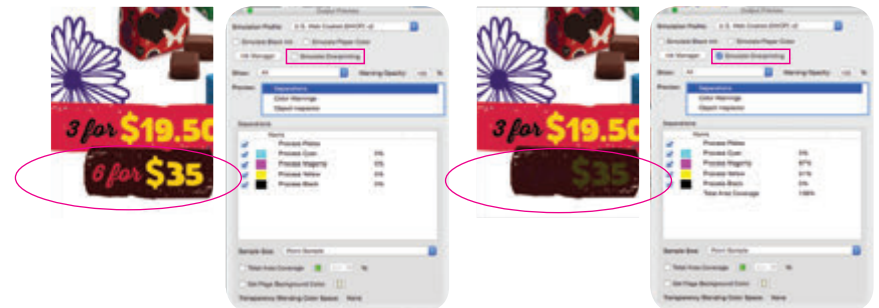
What is trapping?

Trapping is a prepress procedure that introduces areas of color into color separations. When printed, these areas obscure potential register errors.

These errors are usually caused by the paper shifting or changing shape while it is printed, or by presses or plates that are out of register. As a result, the colors print incorrectly.

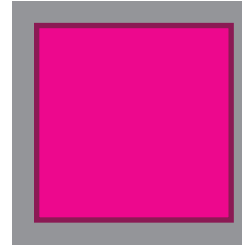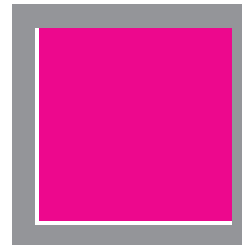**WITH TRAP**

Excessive register error is evident when the colors in an image appear blurry, but typical register error is much more subtle. When colors go out of register, the edges of touching colors either overlap, creating an unattractive color intersection, or they spread apart, creating a partial outline of white paper showing through (See the illustration on the left).

WITHOUT TRAP

Compensating for register error involves corrective trapping elements which can be surprisingly complex, for artwork can have many different colors and types of color intersections.

The methods for creating corrective trapping elements must be extra-ordinarily sophisticated—they must resolve every possible press register error for any combination of colors and printing elements.

- For best results, trapping should be applied by the printer and not in the application. Trapping settings made in the application are not included in the PostScript when printing with the Composite mode.

- Avoid instances where trapping to gradients or images is required (the change in color may not reproduce well).

How can I avoid my blues coming out as purple?

When using blue in your design, always make sure to leave at least a 30% difference in your Cyan and Magenta values. Blue is very close to purple in the CMYK print spectrum. Use as little amounts of magenta as possible.

On Screen

Same color after printing.

How do I define a rich black?

Rich black contains a mixture of 100% K along with additional CMY values. This will enable you to achieve a darker tone than just black ink alone. We recommend that you use the following values:
C=60 M=40 Y=0 K=100.

100% BLACK	RICH BLACK

How can Pantone colors affect the way my job prints?

There are three different ways Pantone colors can affect the way your job prints.

The first is by object effects, such as shadows or glows, on top of your Pantone colors. To avoid this, convert all your Pantone colors into CMYK before submitting your order.

The second way Pantone colors can affect your file is when you use transparent images.

The last way Pantone colors can affect your order is the color conversion between a Pantone color and CMYK. If you use Pantone colors in a job that will print CMYK, your job might print with undesirable colors.

Here is what the effects will look like on screen:

(1)

Here is what the effect looks like after printing:

Here is what a transparent image looks like on screen:

(2)

Here is what a transparent image looks like after printing:
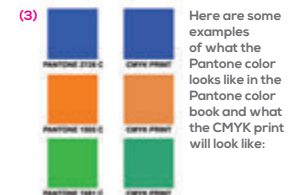
(3) Here are some examples of what the Pantone color looks like in the Pantone color book and what the CMYK print will look like:

You can see the image is no longer transparent on top of the Pantone color. These white areas will show up during printing. To fix this issue, convert all your Pantone colors into CMYK. If you need to have a Pantone color in your art, for example when doing a silver 877c job, you must create a clipping mask around the image so the white area will not show up. This must be done before submitting the order.

How do I set up a booklet that has multiple pages?
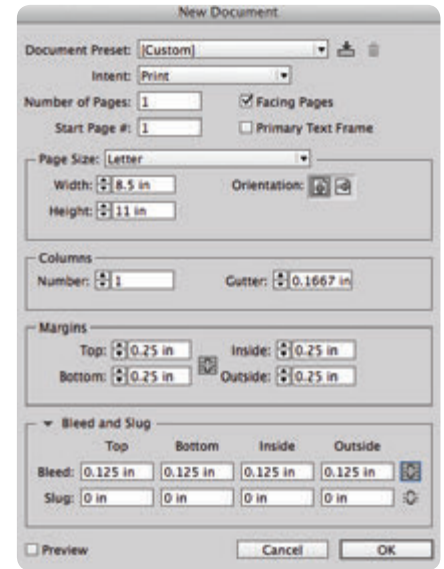
Here are some general rules of thumb when you create a multi-page booklet:

- The page count starts with the cover as Page 1. The inside front cover will be page 2 and each consecutive page follows with 3, 4, 5...
- The file must be in single pages. We will not accept readers or printers spreads.
- Multi-page PDFs are preferred but single-page PDFs are also accepted.
- Allow .25" for the total bleed outside the trim and a .5" for the total safety inside the trim.

For example, a 5.5 x 8.5 booklet with bleed should be 5.75 x 8.75 and an 8.5 x 11 booklet should be 8.75 x 11.25.

Crossovers are any images, graphics or text that extend from one page to another. They require special attention in order to be printed properly.

Crossovers work best when used with large images and artwork. Try to avoid faces in the fold area. Allow for text to have a larger safety area and avoid having text in the fold area.

Any artwork created in InDesign or other layout software as facing pages or spreads should be saved as a single-page PDF.

See the instructions on the top right about how to set up your document in Adobe InDesign.

How to set up a Spot UV mask file?

When ordering Spot UV business cards, a Spot UV mask for the business card is required. In this short tutorial, we will show you how to properly set up a Spot UV mask. Please note that the Spot UV masks CAN-NOT contain any gradients, drop shadows, or low resolution graphics. All mask files must be a separate file from your main print files.

Quick Tip – This tutorial also applies to Spot UV/AQ, Embossing, Debossing, Foiling and other Spot UV masks as the mask prepping is the same.

Step One: Getting You Started

First, you'll have to determine whether or not you will need Spot UV for one side of the business card or both sides. If your business card will only have Spot UV on one side, you should have a total of three files (front print, back print, front Spot UV mask). Having Spot UV on both sides of the business card should have a total of four files (front print, back print, front Spot UV mask, back Spot UV mask). These Spot UV masks must be on a WHITE background and the Spot UV selection must be filled with 100% K (black).

Step Two: Establishing Your Mask

We will be adding Spot UV on both front and back of the business card. The Spot UV look that this business card will achieve is the 'black-on-black' look that's very popular with Spot UV. Proper file naming conventions are very important to ensure that the Spot UV lines up properly. For example if submitting Jpeg files you would name them: 1. Front.jpg   2. Front_Spot.jpg   3. Back.jpg   4. Back_Spot.jpg

FRONT

This is the front print file (should not contain any Spot UV masks or markings). This file is strictly for print and has nothing to do with the Spot UV mask.

BACK

This is the back print file (should not contain any Spot UV masks or markings). This file is also strictly for print and has nothing to do with the Spot UV mask.

FRONT_SPOT

This is the front Spot UV mask file. This file MUST be separate from your front print file. The mask file needs to be on a white background and your Spot UV selection must be filled with 100% K (black). Anything filled with 100% K, will be in Spot UV. The white area will be matte.

BACK_SPOT

This is the back Spot UV mask file. This file MUST be separate from your back print file. The mask file needs to be on a white background and your Spot UV selection must be filled with 100% K (black). Anything filled with 100% K, will be in Spot UV. The white area will be matte.

Step Three: Confirm Your Mask Placement

Please keep in mind that during production Spot UV can shift up to 1/16". We advise that you DO NOT use Spot UV for small, thin text because of a possible shift. Spot UV is a transparent UV Coating that is applied to the top layer of the business card. Spot UV can also make certain colors more vibrant due to its high gloss coating. Below is an example of where the Spot UV masks will be placed. The Spot UV masks are highlighted in a magenta color to show the placement of your mask.

How do you package your InDesign files for print?

When using InDesign, a great way to make sure your printer will receive everything they need to correctly print your document is to create a "Package" containing all of the necessary files. Fonts, images and other necessary items are put in one folder that you can easily send to your printer.

InDesign does this automatically with its "Package" function. To package your InDesign file:
1. Open your file in InDesign.
2. Click File > Package...
3. Go through the menu options on the left and check:
a. Fonts: All the fonts you want to use are in the list and the status for each one is OK. Click "Find Font..." if anything is missing.
b. Links & Images: Make sure each image type says "CMYK" and not RGB and that the status of each image is "Linked." We prefer linked, rather than embedded images because it saves disk space. If any of the images are missing, click on them in the list and then click "Relink."
4. Click the "Package..." button.
5. Choose a descriptive name for the text file that will be included with the package. This file will contain instructions for the Prepress team. It is also helpful if you fill out the other requested information (Contact, Company, Address, Phone, Fax, Email). Click "Continue."
6. Select a destination for the packaged folder (preferably the same folder your original InDesign file is located in) and give it a descriptive name. Click "Save."
7. The packaged folder will be created in the location you specified. Make sure it contains:
a. A .txt file
b. An InDesign file
c. A Fonts folder containing all the fonts you used (there may be "extra" fonts in this folder
d. A Links folder containing all the images you used
8. Compress or "zip" this folder and send it to your Print Provider.

More about the Package function
The Package dialogue box has several menu options that will help you ensure all fonts and images are linked or embedded, and that the colors are correct. These options can help you locate issues in your InDesign document you may not have been aware of.

Summary
Information about the document is displayed here, including any errors that are found (such as images that are not in CMYK, missing fonts and images).

Fonts
This lists all the fonts that are used in the document. It tells you the name of the font, what type it is (PostScript, TrueType, etc), and if it is present or missing. If there are errors, select the specific font and then click "Find Font..." to see available options. You can change the font in the "Find Font" window, if you wish. Each instance of the original font will be changed to the new font you specify in the "Replace With" section of the "Find Font" dialogue box.

Prepress Checklist

Digital Prepress... the most complicated part of printing for both printers and designers alike. Common Problems: no bleed, missing fonts, low resolution photos, full color black text, files saved and packaged incorrectly.

The next time you design a project and submit it to us for printing, take a peek at this list and your life and our job should be much easier!

When creating documents to send for digital output, please ensure that:
- ✔ The document dimensions are correct and at the right size for output.
- ✔ All images are correctly positioned and linked.
- ✔ Logos or graphics created in programs like Illustrator, have all type converted to paths or outlines.
- ✔ In your page layout program, the status of all imported pictures or links should be "ok."
- ✔ You have only used fonts that you intended to use for output.
- ✔ All unused colors have been deleted.
- ✔ Check that spot colors are converted to CMYK.
- ✔ All document bleeds have been extended at least 3mm beyond the desired finished size of your project.
- ✔ All documents have been proofread and double-checked before submission. Have a friend proofread it!

Design & Prepress Checklist:
- ✔ Do not use Publisher or Freehand. Stick to Adobe Products for ease of use.
- ✔ Try not to use Microsoft Office programs like Word or Excel. If you have no alternative, generate a PDF of your final file.
- ✔ Remember, Photoshop is for photos. Illustrator is for illustrations. InDesign is for Page Layout.
- ✔ Do not use RGB images whenever possible. Convert them to CMYK.

Before submitting files, please make sure that you have included:
- ✔ All fonts required to process and print the document.
- ✔ All attached EPS and/or TIFF/JPG files.
- ✔ Final laser prints of all document pages.

If all else fails, submit a PDF with appropriate bleeds and crop marks.
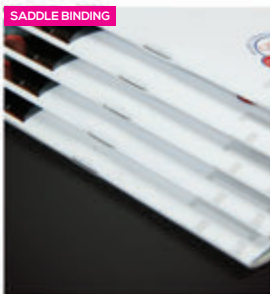
What types of file formats are acceptable?

Acceptable formats are PDF, JPG and TIFF. Files created from Microsoft PowerPoint, Word, Excel or other programs must be given to us already imaged in a high-resolution PDF file (at least 300dpi resolution).

Supported Applications
• InDesign • Illustrator • Photoshop • Acrobat

WIRE BINDING

SADDLE BINDING

PERFECT BINDING

CASE BINDING

DIE-CUT

ENGRAVING

EMBOSSING

DEBOSSING

FOIL STAMPING

MOUNTED CARDS

LABELS

STICKERS

WIRE BINDING

Wire binding is a popular commercial book binding method, and is known by a number of different names including twin loop wire, wire-o, double loop wire, double-o, ring wire and wirebind. With this binding method, users insert their punched pages onto a "C" shaped spine and then use a wire closer to squeeze the spine until it is round. Documents that are bound with wire binding will open completely flat on a desk and allow for 360 degree rotation of bound pages.

SADDLE STITCHING

A saddle stitch is appropriate for small booklets and, in general, for volumes with only a few pages. Most magazines that are not glued are saddle stitched: that is, they are held together by staples that run through the gutter. Once the pages are aligned and in the right order, this type of binding is quite straightforward. Staplers with extremely long jaws, designed specifically for saddle stitching. Saddle stitching can also be done to the individual codex, using a needle and thread, as part of the process of binding them together into a larger book.

PERFECT BINDING

Perfect bound books add a certain style and sophistication to the look and feel of your books, which just can't be matched by spiral and comb binding. Perfect binding gives you a professional quality soft cover style book and is the only binding option that allows you to print on the spine. We print your cover on a cardstock sheet that wraps around the interior pages of the book creating the front cover, spine, and back cover. The interior pages are then glued into the spine of the book.

CASE BINDING

Case binding is the process for making hardcover books, such as reference books, yearbooks, children's books, novels, vanity books, coffee table books, art books, law books, medical books and most custom books. The advantages of case binding a book are the strength and durability you get from the various case binding techniques. The look of the hardcover book is also superior with the availability of leather, papers and multiple fabrics that can be used to encase the book. These materials coupled with the variety of specialty finishing techniques, such as embossing or foil stamping, give the casebound book a professional, classy, or artistic look. A printed dust jacket can also be applied to finish off your book.

DIE CUTTING

Create shapes and contours giving your printed piece a dynamic edge. This process utilizes sharp steel rules to define shapes. It can be performed on either a flatbed or rotary press. Decorative elements or patterns can be punched out and eventually incorporated into a larger piece. Create interesting folds, flaps or even holes if necessary for hanging. Commonly used for envelopes, cards, stickers, labels, business cards, magnets, door-hangers, boxes ...

ENGRAVING

Engraving, in a printing context, is a method of creating raised areas of print or images on paper, such as a business card or letterhead. An impression is created on a metal plate, which is then filled with opaque ink. When paper is pressed into the plate, it creates raised and colored areas. A similar effect can be created by thermographic printing . Engraving and gravure are the two most common forms of intaglio printing

Using engraving, an artist can make either highly detailed images or images with a sketchy quality, depending on the number and thickness of the engraving lines.

EMBOSSING AND DEBOSSING

Makes peaks or valleys on your printed piece. Embossing is a technique where a design is impressed onto a particular stock. The design is "raised" when graphics or type is pressed into the paper from underneath. This requires a male/female die combination. The raised area can have a surface where ink has been applied. It can even have foil or be intentionally left blank (un-primed) known as a blind emboss. Debossing is the opposite process where the imprint causes a "depression" on the paper or stock.

FOIL STAMPING

Foil stamping is a special kind of printing procedure where heat, pressure, and a metallic paper (foil) is used to create different shiny designs and graphics on various materials. Foil stamping gives the stamped design a shiny and incredible look and is increasingly becoming the preferred method of printing in many an industry.

Foil stamping is also referred to as hot stamping (because of the use of heat), foil printing, dry stamping, and leaf stamping. There are various types of foil stamping that can be used depending on your design needs.

Foil mask files are set up just like our Spot UV mask files. The file can only be black and white. All black areas should be 100k or only 100% black with no other colors added. Black in the areas you want the foil and white in the areas you do not want the foil. If you order a Foil job with Spot UV, you must provide separate mask files for the Foil (foil mask) and UV (spot uv mask). In that case, up to 6 files will need to be provided.

MOUNTED CARDS

These cards make a bold and lasting impression and feel different from run-of-the-mill cards. The added thickness also adds strength and resilience. When we say added thickness, we mean 2x, some even 3x thicker than standard. Make a strong first impression and stand out from the crowd with a mounted card.

LABELS & STICKERS

Businesses rely on quality label and sticker printing for a wide variety of uses, from brand promotion to selling and shipping products, offering crisp, eye-catching labels and stickers in a convenient and cost-effective manner.

We digitally print labels on a vast array of paper stock and substrates. This affords you incredible flexibility to test out various designs on different mediums, change images and text, and engage in just about any type of personalization or customization you desire. Since digital label printing does away with pricey set-up costs, such as film and plate charges, you can also take advantage of short-run label and sticker printing, allowing you to order only as many as you need.

HP INDIGO
SOLID COLOR CHART

CMYK

Digital Offset

HP INDIGO

HP Indigo Digital Offset Color, based on unique **HP ElectroInk technology** that can equal the quality and color range of offset printing.

Composed of a liquid solution carrying micron-sized electrically charged particles. HP ElectroInk enables the control of even the smallest particles sizes at the high speeds required for top quality color and productive printing.
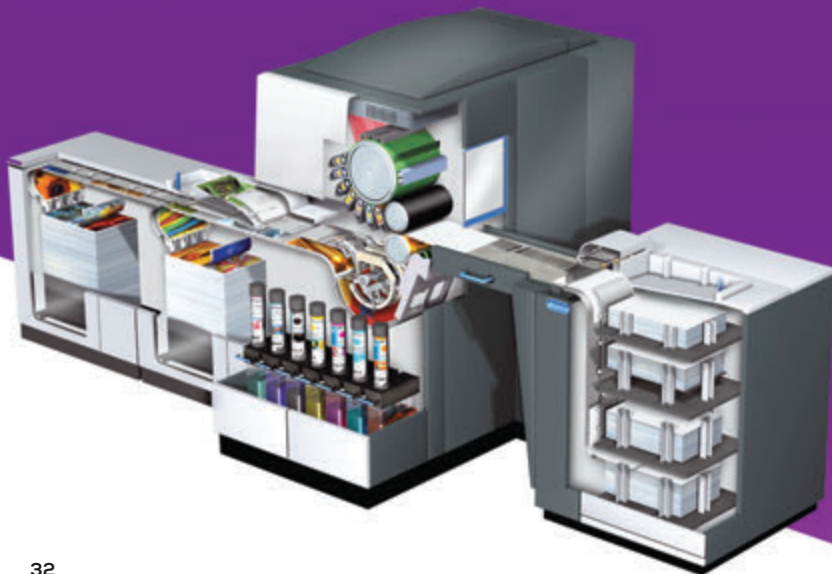
PRINT QUALITY COMPETITIVE ANALYSIS
HP Version 20.0i, Zohar Lider

Xerox 8000
Xeikon 5000
Kodak NexPress 2100 plus
Xerox iGen3
HP Indigo 5000
Kanori Offset

Digital Press
Offset Press

Offset quality

digital printing technology

top quality and productive printing
based on unique HP ElectroInk technology

YUMMY   YUCKY

Let's Face The Difference!
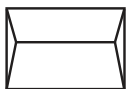# Liquid INK or TONER

HP Indigo
Liquid INK
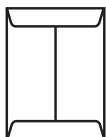Based Printing

Xerox I'Gen
NexPress
Canon
Minolta
Digital Copier

TONER
Based Printing
simulation.

ENVELOPE
SIZE CHART

A-LINE ANNOUNCEMENT STYLE

A-2 – $4^3/_8$ x $6^3/_4$
A-6 – $4^3/_4$ x $6^1/_2$
A-7 – $5^1/_4$ x $7^1/_4$
A-8 – $5^1/_2$ x $8^1/_8$
A-9 – $5^3/_4$ x $8^3/_4$
A-10 – 6 x $9^1/_2$
A-Long – $6^7/_8$ x $8^7/_8$

OPEN-END CATALOG

8 Glove – $3^7/_8$ x $7^1/_2$
7 Glove – 4 x $6^3/_4$
1 Scarf – $4^5/_8$ x $6^3/_4$
3 Scarf – 5 x $7^1/_2$
$4^1/_2$ Scarf – $5^1/_2$ x $7^1/_2$
6 Scarf – $5^1/_2$ x $8^1/_4$
1 Catalog – 6 x 9
$1^3/_4$ Catalog – $6^1/_2$ x $9^1/_2$
3 Catalog – 7 x 10
6 Catalog – $7^1/_2$ x 10 $^1/_2$
8 Catalog – $8^1/_4$ x 11 $^1/_4$
$8^1/_2$ Catalog – $8^1/_2$ x 10 $^1/_2$
$9^3/_4$ Catalog – $8^3/_4$ x 11 $^1/_4$
$10^1/_2$ Catalog – 9 x 12
$12^1/_2$ Catalog – $9^1/_2$ x 12 $^1/_2$
12 Catalog – 10 x 12
$13^1/_2$ Catalog – 10 x 13
15 Catalog – 10 x15
$14^1/_2$ Catalog – 11 $^1/_2$ x 14 $^1/_2$
$15^1/_2$ Catalog – 12 x 15 $^1/_2$
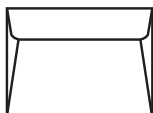
BOOKLET

$2^1/_2$ – $4^1/_2$ x $5^7/_8$
3 – $4^3/_4$ x $6^1/_2$
$4^1/_2$ – $5^1/_2$ x $7^1/_2$
5 – $5^1/_2$ x $8^1/_8$
6 – $5^3/_4$ x $8^7/_8$
$6^1/_2$ – 6 x 9
$6^5/_8$ – 6 x $9^1/_2$
$6^3/_4$ – $6^1/_2$ x $9^1/_2$
$7^1/_4$ – 7 x 10
$7^1/_2$ – $7^1/_2$ x 10 $^1/_2$
9 – $8^3/_4$ x 11 $^1/_2$
$9^1/_2$ – 9 x 12
10 – $9^1/_2$ x 12 $^5/_8$
13 – 10 x 13

COMMERCIAL REGULAR

5 – $3^1/_{16}$ x $5^1/_4$
$6^1/_4$ – $3^1/_2$ x 6
$6^1/_2$ – $3^1/_2$ x $6^1/_4$
$6^5/_8$ – $3^5/_8$ x $6^1/_4$
7 – $3^3/_4$ x $6^3/_4$
$7^3/_4$ – $3^7/_8$ x $7^1/_2$
8 (Monarch) – $3^7/_8$ x $7^1/_2$
$8^5/_8$ – $3^5/_8$ x $8^5/_8$
9 – $3^7/_8$ x $8^7/_8$
10 – $4^1/_8$ x $9^1/_2$
$10^1/_2$ – $4^1/_2$ x $9^1/_2$
11 – $4^1/_2$ x 10 $^3/_8$
12 – $4^3/_4$ x 11
13 – $4^5/_8$ x 11 $^1/_4$
14 – 5 x 11 $^1/_2$
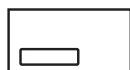
COMMERCIAL WINDOWS

$6^1/_4$ – $3^5/_8$ x 6
$6^3/_4$ – $3^5/_8$ x $6^1/_2$
7 – $3^3/_4$ x $6^3/_4$
$7^3/_4$ – $3^7/_8$ x $7^1/_2$
8 (Monarch) – $3^7/_8$ x $7^1/_2$
$8^5/_8$ – A & B Window
9 – $3^7/_8$ x $8^7/_8$
10 – $4^1/_8$ x $9^1/_2$
$10^1/_2$ – $4^1/_2$ x $9^1/_2$
11 – $4^1/_2$ x 10 $^3/_8$
12 – $4^3/_4$ x 11
13 – $4^5/_8$ x 11 $^1/_4$
14 – 5 x 11 $^1/_2$
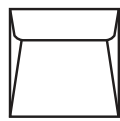
SQUARE BOOKLET

From $4^1/_2$ to $9^1/_2$
in $^1/_2$ inch increments
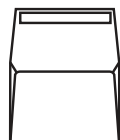
REMITTANCES

$6^1/_4$ – $3^1/_2$ x 6
$6^1/_2$ – $3^1/_2$ x $6^1/_4$
$6^3/_4$ – $3^5/_8$ x $6^1/_4$
9 – $3^7/_8$ x $8^7/_8$
10 – $4^1/_8$ x $9^1/_2$
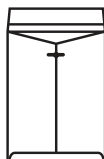
CLASP

10 – $3^3/_8$ x 6
15 – 4 x $6^3/_8$
25 – $4^5/_8$ x $6^3/_4$
35 – 5 x $7^1/_2$
40 – $5^1/_2$ x $7^1/_2$
50 – $5^1/_2$ x $8^1/_4$
55 – 6 x 9
63 – $6^1/_2$ x $9^1/_2$
68 – 7 x 10
75 – $7^1/_2$ x 10 $^1/_2$
81 – $8^1/_4$ x 11 $^1/_4$
83 – $8^1/_2$ x 11 $^1/_2$
87 – $8^3/_4$ x 11 $^1/_4$
90 – 9 x 12
93 – $9^1/_2$ x 12 $^1/_2$
94 – $9^1/_2$ x 14 $^1/_8$
95 – 10 x 12
97 – 10 x 13
98 – 10 x15
105 – 11 $^1/_2$ x 14 $^1/_2$
110 – 12 x 15 $^1/_2$

BARONIAL

3 – $3^1/_4$ x $4^1/_4$
4 – $3^5/_8$ x $5^1/_8$
Gladstone – $3^5/_8$ x $7^5/_8$
5 – $4^1/_8$ x $5^5/_8$
$5^1/_2$ – $4^3/_8$ x $5^3/_4$
6 – $4^3/_4$ x $6^1/_2$

Other popular envelopes are: First-Class Mailer, Strip and Grip, String and Button, Latex Seal, Open Policy, Coins and Wallet Flap.

Paper Weight Comparison Chart

Bond Ledger	Text Book	Cover Cardstock	Index --	Pt --
16	40	22	33	3.2
18	45	24	37	3.6
20	50	28	42	3.8
24	60	33	50	4.8
28	70	39	58	5.8
29	73	40	60	6
31	81	45	66	6.1
35	90	48	74	6.2
36	90	50	75	6.8
39	100	54	81	7.2
40	100	56	83	7.3
43	110	60	90	7.4
44	110	61	92	7.6
47	120	65	97	8
53	135	74	110	9
54	137	75	113	9
58	146	80	120	9.5
65	165	90	135	10
67	170	93	140	10.5
72	183	100	150	11
76	192	105	158	13
82	208	114	170	14
87	220	120	180	15
105	267	146	220	18

Table of Paper Sizes From A0 to A10

Format	mm	Inches
A0	841mm × 1189mm	33.1" × 46.8"
A0+	914mm × 1292mm	35.9" × 50.8"
A1	594mm × 841mm	23.4" × 33.1"
A1+	609mm × 914mm	24" × 36"
A2	420mm × 594mm	16.5" × 23.4"
A3	297mm × 420mm	11.7" × 16.5"
A3+	329mm × 483mm	12.9" × 19.0"
A4	210mm × 297mm	8.3" × 11.7"
A5	148mm × 210mm	5.8" × 8.3"
A6	105mm × 148mm	4.1" × 5.8"
A7	74mm × 105mm	2.9" × 4.1"
A8	52mm × 74mm	2.0" × 2.9"
A9	37mm × 52mm	1.5" × 2.0"
A10	26mm × 37mm	1.0" × 1.5"

US Paper Sizes

Format	mm	Inches
Letter	216mm × 279mm	8.5" × 11"
Legal	216mm × 356mm	8.5" × 14"
Junior Legal	203mm × 127mm	8" × 5"
Ledger	432mm × 279mm	17" × 11"
Tabloid	279mm × 432mm	11" × 17"

HOW TO USE THE CHART

When selecting a paper stock, keep in mind the equivalents to each paper choice available. This will be able to tell you how thick the paper will be and assist you in making the right selection.

Note that Bond, Text, and Cover are usually in LB. If for example the paper stock is a 14 pt. cover, then it used points (pt) and not pounds (lbs).

PAPER WEIGHTS

Bond Paper
A light-weight stock, also known as Ledger or Writing. It is commonly as 24 LB or 28 LB Bond Weight.

Text Paper
Also known as Offset, Text Paper is thicker than Ledger Paper, but not as thick as a Cover Paper. Stationery usually has a 70 LB or 80 LB Text Weight.

Cover Paper
A Card Stock or Pasteboard paper. Known commonly to be used for business cards and greeting cards, but can also be applied to brochures and flyers. It is commonly used as 80 LB Cover Weight, although some brands of paper offer cover weight paper that is 100 LB or heavier.

PAPER TYPES

Coated
Stock that has a surface sealant and relates to sheen: gloss, matte, dull and satin finishes. Works well particularly with photos.

Gloss
Stock that has a high sheen; most magazines use gloss paper.

Dull and Satin
Stock that has a smooth surface paper that is low in gloss. Dull and Satin coated paper falls between matte and glossy paper.

Matte
A non-glossy, flat looking paper stock.

Uncoated
Stock that has not been coated with clay or other surface sealants. Cannot be combined with UV or Aqueous coating.

COATING TERMS

C1S
Coated one side.

C2S
Coated both sides.

DIGITAL**CITY** MARKETING
PRINTING | GRAPHICS | WEB DEVELOPING | MARKETING