



Specifications for Supplying Files

Guide to preparing files for Print

Accepted software versions

Quark XPress: 7.0/8.0 InDesign: CS3/CS4/CS5 Photoshop: CS3/CS4/CS5 Illustrator: CS3/CS4/CS5

Acrobat: 8/9



Accepted file formats

WORKING FILES

Quark XPress InDesign

Illustrator Photoshop (not for multi-page layout)















*If you are working in any other application, please supply PDF or PostScript files.

PDF FILES

PDF (Portable Document Format) is a universal file format which we accept from any platform or operating system as long as the file conforms to our specifications. Please see our PDF File Preparation Guide for details.

POSTSCRIPT FILES

*.prn (PC) *.ps (Mac)











(Brisque or Prinergy PPD required)

CREO BRISQUE (.job format)

Resolution: All LW resolutions must be set at 2400dpi (res94.48819); CT resolutions at a minimum of 304.8dpi (res12). All vignettes should go to LW when possible. Offsets: CT offsets should be set at 0,0.





CT on CT must be set at CT resolution, not LW. All .jobs must be self-contained: (i.e. contain all pages to be used within the .job, beginning with P-1.p and having pages consecutively numbered); .jobs can also be sent with each page as a separate .job, provided that each page is P-1.p.



Accepted Media CD-R/DVD-R

File Transfer

FTP SITE host: ftp://ftp1.hh450.com/ Please contact your customer service representative for user name and password. Please use an FTP client software such as Transmit when uploading.



Files under 3MB can be sent by email.

Submitting files

Be sure to send only the last version of your electronic files. Sending earlier versions can result in the wrong file being output. **Send all necessary fonts and images with your files**.

*Supply original layered Photoshop files for all built Photoshop EPS files.

Your electronic files should be accompanied by an up-to-date laser proof. If there are any changes made after the laser has been printed, please supply a new laser, or indicate the changes on the laser proof. If there are any discrepancies between the laser proof and electronic file, the job must be put on hold until we receive confirmation as to which is correct. The laser proof should be printed single-sided and at 100%. Please include crop marks. If you are unable to print your files at 100% with crop marks, please print the document tiled at 100% with crop marks, and paste the tiles together, or as a last resort, print the document with crop marks at a reduced size but let us know the percentage of reduction.

*Supply and Mark any previously printed cards or collateral pieces that we may have to match for color.

Electronic Transmission: Please alert us that files have been sent. Supply an email or PDF, jpg and after hours contact information to facilitate communication.

If you are sending PDF (.pdf), TIFF (*.tif), PostScript (*.ps *.prn), you do not need to apply any compression or encoding. They can be sent as-is, so long as the file extensions (as indicated above) appear in the correct name.





All other files require compression before they are sent.

For Mac, use Stuffit to compress and encode your files. For PC, we recommend using WinRAR to compress your files.



Fonts

- Please send us only all the fonts used in your document.
- When collecting your fonts, please collect them from the same computer used to create your document.

Often fonts from other sources with the same name have slight variations that can cause re-flow of your document.



- As prepress is a PostScript workflow, PostScript (or Adobe Type 1) fonts are the ideal fonts to use for predictable, high-quality output. OpenType, TrueType and Composite (double-byte) fonts are also accepted but are not necessarily as reliable as PostScript fonts.
- If using Postscript fonts, please send both the screen and printer fonts (OpenType and TrueType have only one file containing both screen and printer information), and always send the entire family of fonts (e.g. bold, italic, bold italic, etc.).
- If you modify your font using the style palette (e.g. bold, italics, etc.) be absolutely certain you have the actual bold or italic font loaded on your system. Otherwise the application will attempt to modify your font artificially with unexpected results.
- Don't forget to send fonts used within eps files and logos. Better yet, embed the fonts in your eps. You may also convert your fonts to outlines in Illustrator. If you do, be sure that your resolution is set to 2400 dpi for best quality prior to converting fonts (File > Document Setup > Printing and Export > Output Resolution). This turns your font into a graphic so you no longer have to worry about collecting the font, but the text will no longer be editable.

Scanning and photo treatment

Our experienced operators would be happy to scan the images for you.

If, however, you choose to do the scanning yourself, please keep the following points in mind... If you are scanning from a previously printed piece such as a book, newspaper or magazine, you will need to apply descreen at the time of scanning or else a pattern (moiré) will appear in the final product. This should be one of the options in your scanner software.

While low-end desktop scanners have made incredible advances in the last few years, there are still certain instances where professional scans on a drum scanner or high-end desktop scanner are required: If you want to enlarge the image by more than 200%, if your work is color-critical, or if you are scanning slides and transparencies. Pure black and white graphics or drawings should be scanned as bitmap or line-art. Images or graphics with gray shading should be scanned as grayscale. Color images should be scanned as RGB, and converted to CMYK.





Resolution

Different paper stocks, different types of presses and different products all require different amounts of resolution. In general, however, we recommend you scan your color and grayscale images at 300 dpi and your lineart (or black and white) images at 800 dpi. This will keep your file size manageable, but allow enough resolution for a wide variety of different print applications should you ever decide to repurpose your images.

Please bear in mind that resizing images in a page layout application affects the image's resolution proportionately. In addition, the resizing capabilities of applications such as Photoshop are extremely limited and should not be relied upon to produce good quality images. Therefore it is important to know the final image size required in the layout prior to scanning.

If you do not know the final size, scan the image to the maximum possible size, and when the size is known, use Photoshop (rather than a page layout application such as Quark XPress) to resize your image whenever possible. Avoid rotating large images in your page layout application.

Line-art

Line-art (or Bitmap files) should be scanned at 800dpi for maximum quality. In most workflows, Bitmap files can be output at extremely high resolutions, while Grayscale and Color images containing excess resolution are down-sampled to 300dpi. This can happen in Acrobat Distiller, when creating PDFs, or it can happen automatically at the printer's RIP. 300dpi is an acceptable resolution for most Grayscale and Color files. If, however, your images contain a strong line-art or solid black component, you will need more resolution in order to ensure the smoothness of the lines. If you have color or grayscale images requiring a higher resolution, please be sure to include a covering letter to the printer, asking them to override any automatic RIP settings.

Color and grayscale images with a strong line-art component can be scanned up to 800dpi (as with normal line-art), but should be saved as either Grayscale or CMYK images. Bear in mind that the additional gray shading and/or color information will make your file size extremely large. In a book with many images of this type (such as a comic) it is acceptable to go as low as 400dpi in order to make files more manageable.

Color

- Vector Graphics and Color images should be supplied in CMYK color space. RGB is the color mode used for display devices such as monitors and televisions, and is not printable. Please convert your RGB images to CMYK before submitting your files, or making PDF.
- Do not use spot colors in your file unless they have been specified in your quote. Convert your spot colors to CMYK before submitting your files, or making PostScript and PDF.





- Grayscale files should contain no color. Please be sure to convert all graphics, type and images to grayscale before submitting your files, or making PostScript and PDF.
- Any graphic or image imported into your page layout application from a program such as Illustrator or Photoshop should be in the correct color space prior to being imported.

Color correction and color management

What you see on your monitor is not necessarily a reliable representation of the tone or density of the final printed product.

While your monitor uses pure Red, Green and Blue light to display the images, the printed piece will be made from Cyan, Magenta, Yellow and Black inks which are inherently impure. While your monitor reflects light, ink absorbs it. Monitors tend to have a bluish cast, while paper tends to have a yellow or grey cast. Paper will soak up ink, causing your image to darken, and the grain of the paper can cause some unevenness, mottling or flecking in the image that will not be present on the monitor.

In addition, every monitor is different – different make, different model, different age – as is every user. Your monitor may appear different in the morning than it does in the afternoon light. Color of the walls surrounding the monitor and quality of the lighting source will alter your perception of colors on the monitor.

Your monitor preview can be improved by following some simple calibration and color management steps but your monitor should never be relied upon as 100% accurate. Likewise, **your internal color proof cannot be considered accurate (for many of the same reasons listed above) unless it is regularly calibrated, and color-managed correctly.** For all these reasons, we recommend that any color correction or color-critical scanning be left to someone with a fully color-managed workflow.

PLEASE NOTE: WHILE WE DO OFFER COLOR CORRECTION (CHARGED AT AN HOURLY RATE), WE WILL NOT COLOR CORRECT A FILE TO MATCH A CLIENT-SUPPLIED PROOF UNLESS DIRECTED TO DO SO. UNLESS OTHERWISE NOTED, WE WILL ASSUME THAT ANY CLIENT-SUPPLIED PROOFS ARE FOR CONTENT AND PLEASING COLOR ONLY.

IF YOUR PROOF IS INTENDED AS A COLOR-CONTRACT PROOF, IT MUST CONFORM TO (ISO,SWOP,GRACoL) STANDARDS, CONTAIN A COLOR BAR FOR QUALITY CONTROL, AND INDICATE ON WHAT TYPE OF DEVICE IT WAS CREATED.

If you do require color correction, please contact your Customer Service Representative for a quote, and please supply some color references to assist us.





Overprints and rich blacks

With today's high-end digital workflows, trapping is generally handled by the printer. Overprint settings, however, can still be modified by the designer to create desired effects such as rich blacks. While in theory, black ink should be as dark a color as you can print, in reality, black ink is somewhat translucent. An even darker color can be achieved by combining black with a second color (typically 40% Cyan) or a combination of Cyan, Magenta and Yellow. This is called a "rich black". The knocked out text eliminates the problem of variation in the underlying image, but isn't as dark as it could be. In addition, it now must be registered to fit perfectly overtop of the white knock-out which has been created in the underlying image.

The rich black text and bar have more punch than the 100% black text. In addition, they are dark enough to obscure any variation in the underlying image and so can be overprinted, eliminating the need for registration.

Rich black can be used to add punch to large block type or large areas of black fill, but should never be used for text below 18 pts or keylines below 2pts, which could cause registration difficulties on press. Never use rich black if you are printing a product with multiple versions where there will be a change to the black plate.

If you are using rich black in your layout, be sure to use it consistently throughout or you will be able to see a difference between the elements in 100% black and the elements in rich black. Please note: If you intentionally modify your overprint settings on specific objects, please be sure to notify us when submitting your files so that your modifications will be respected.

Page layout

If your project contains more than one page, you should create it in a page layout program such as Indesign, Quark or PageMaker. Single page projects such as cover or jacket can be created either in the page layout applications listed above, or in a drawing or photo treatment application such as Adobe Illustrator or PhotoShop. Avoid using type in Photoshop except for larger titles and headlines.

Your document size should be the exact size of the final trimmed product in the case of an insert or interior. The document size for a cover or jacket will be the width of the book times two, plus the width of the spine and flaps, if necessary.

Page size should equal the trim size of the book plus 1/8"-1/4" bleed allowance if images bleed off the page. Page scale should always be 100%. Orientation can be landscape or portrait.

- Do not cover up or mask unwanted elements with filled boxes, lines or ovals. The hidden elements are still part of your job and may appear on film or printing plate.
- · Always specify actual line thickness; never use a default "hairline." The width of a hairline is resolution-dependent, and on a high-resolution output device, default hairlines might not be reproduced.





A hairline rule is defined by your software as the thinnest line a given output device can create. If you are printing to a 300dpi printer, your line will be 1/300 of an inch, and will be visible. When printed to a platesetter at 2400dpi, the line will be 1/2400 of an inch, and will become invisible. Therefore, never use hairline rules. Solid keylines (or rules) must have a minimum thickness of 0.2 pts. Dotted, screened or color rules must have a minimum thickness of 0.3 pts. This also applies to lines used within artwork and graphics.

- · Avoid "nested" EPS files. Copy and paste elements from one EPS file to another instead of using import or place functions.
- · Avoid excessive rotating or sizing of images in the page layout program it's best to use Photoshop or your illustration program.
- · Make sure copy and graphics are not positioned too closely to trimmed edges.
- · Make sure proper fold and trim marks are indicated.
- · Once your layout is complete, remove all unwanted objects and elements from the pasteboard and delete unused pages from the application file. These elements may cause output errors as well as unnecessary and costly output

If you are supplying PDF or PostScript files, it is important that the spine width be set to exactly the right size. If the spine width is not exactly the right size, your PostScript or PDF will be unusable. Folds (on spines or flaps) should be indicated with dotted lines.

If you are supplying PDF files, they should contain crop marks. Please ensure that these crop marks do not print on top of the bleed. Please see the PDF File Preparation Guide for more information on PDF creation.

Corrections and Archive

In general, corrections should be made by the designer and re-supplied either as final working pages, or as PDF files. If, however, you have supplied working files, Hung Hing can make the corrections for you.

If you have supplied PDF files, we can only make simple corrections (single line corrections, small text changes, some color and image modification) to the files. Whenever possible it is better to make all corrections to the working files and to remake the PDFs.

Regardless of who makes the corrections to the files, there is a charge for each page that must be replaced in the layout. For this reason, it is important to proof your job carefully prior to submitting your files. Printer's proofs should be used only as last minute verification.





If you are supplying your corrections in PDF format, they should be supplied as individual pages unless otherwise specified.

Corrections can delay the production workflow. To avoid extra charges and delays, please make every effort to ensure your files are ready for print prior to submitting them.

Corrections will be supplied by client in the form of a revised file. Hung Hing only archive an up-to-date files. Hung Hing don't keep any previously copy.

PDF File Preparation Guide INTRODUCTION







PDF and Adobe Acrobat

Portable Document Format (PDF) is technology from Adobe Systems that has become a standard file delivery format for the graphic arts field. Originally developed as a means of creating and distributing documents that are platform independent, a PDF document may be viewed and manipulated in a variety of computer environments while retaining the richness of the content's design and layout.

PDF documents may be created in a variety of ways ranging from using tools from the Adobe Acrobat software suite, to saving files in PDF format from applications such as Adobe Illustrator and Adobe InDesign. Lest we give the impression that only documents created in Adobe software can be converted into PDF, it is possible to create a PDF document from any software application which can output PostScript. The PostScript can be sent to Acrobat Distiller, software that converts PostScript into PDF.

PDF Benefits

PDF has greatly benefited the prepress process. A few of its immediate benefits are:

PDF pages can be processed independently of one another because PDF packages all the instructions and definitions needed to image a page within each page unit. This simplifies late corrections to multi-page documents, and makes imposition far more flexible. The document is no longer constrained in press forms and can easily be reimposed and moved to other presses. This will eventually shorten processing schedule.





PDF documents are already partially preflighted because they are created from the PostScript file. If there is an error in writing the PostScript, PDF distillation will fail. If the distillation is successful, the document creator can look at the pages for any unexpected errors before sending the file to the printer. **Another pre-processing benefit of PDF is its ability to clean-up complex PostScript files.** When a PostScript file is converted to PDF, it is rewritten into a structure that normalizes the data and helps to eliminate processing surprises. We have found that distilling PostScript to PDF often eliminates some of the problems that cause files to fail.

PDF files are more reliable as on-screen proofs because each page's imaging resources are selfcontained, and they are representative of the PostScript interpretation of your layout files.

PDF files are often smaller than PostScript files, so they can save on network resources for processing and archiving.

The page independence feature of PDF enables document creators to extract, import, and reorganize pages and make new products using their existing intellectual property. Further, PDF supports a variety of interactive features like forms, pop-up windows, content coding, and navigation, making the document far more dynamic for the reader when delivered electronically through the internet or e-books.

Upgrading to Acrobat 5.x, 6.x, or Later

To take advantage of the robust features of Acrobat PDFs, it is desirable to use the most recent version of the technology. However, there are features of PDF 1.4 (the file format of Acrobat 5.x) and PDF 1.5 (the file format of Acrobat 6.x) that cause problems in prepress. **Specifically, the transparency feature available from Illustrator and InDesign and supported in PDFs since the 1.4 format is not fully supported by current generation PDF workflows.** If this feature is used in submitted files, the resulting transparent elements will print as if opaque and cause prepress processing problems that are likely to affect the schedule and quality of the title. Likewise, **the PDF 1.5 format supports the use of layers within a PDF file that may contain different content, as well as a newer compression method called JPEG 2000.** These features may be used within a 1.5 format PDF, but they are not supported by current PDF workflows and so may impede the successful production of a title.

PDF in the Future

Adobe has published specifications for its Portable Job Ticket Format (PJTF), which permits a PDF file to carry information about production and manufacturing specifications in addition to the content. Likewise, the Job Document Format (JDF) is a specific implementation of XML that has been developed to enable the integration and digital control of file processes and equipment





from prepress to the pressroom to finishing. Through tools such as these, we expect to be able to improve our service offerings with PDF workflow as optimization is extended upstream. Systems such as Creo's Prinergy and Agfa's Apogee enable us to extend this optimization throughout the graphic arts continuum.

PDF workflow offers improvement in speed and reliability. It is a more reliable "raw material" with which to create output. But we must work together to implement the technology so that it produces a real improvement in service and not just another technology nightmare. The information in this document is intended to help ensure that result.

NOTES about Hung Hing and PDF

As of August 1, 2005, Hung Hing Printing Group has adopted PDF as its internal file format for all traditional books processing. This means that all files submitted in any format will be preflighted and then converted to PDF and passed through our new Prinergy workflow system. The Prinergy system will allow us to trap, impose, and RIP files in a native PDF format, allowing our customers to realize all benefits of the file format.

Changes in File Preparation

Please submit composite PostScript and PDF files. PDF allows you to view on screen the success (or failure) of the PostScript interpretation of your layout files, and the composite workflow will allow you to see your entire file as it will print, rather than just one color at a time. This will facilitate soft-proofing (on-screen, paperless proofs of your files), and is one step towards a future goal of no-proof printing.

Hung Hing will take the responsibility for trapping all objects in your files, including embedded objects, using Prinergy's sophisticated and powerful trapping engine.

If embedded files have properly created traps, you can request that we honor them. Please be advised that when writing composite PostScript of pages created using QuarkXPress, the traps will not be retained. QuarkXPress only includes trapping information in separated output.

Prinergy's trapping engine will do a far better job in maintaining type widths in overprints and knockouts, and will help avoid the choking and spreading of type in your final output.

We require that files be submitted with high-resolution images embedded. Submitting layout files with low-resolution placeholders instead of the final art will negate the benefit of the pre-test viewing that PDF offers. Bad EPS files and corrupted TIFFs are major causes of PostScript and rendering failures.





We encourage customers to send their fonts with their files, even though following these instructions will embed them. This will further facilitate preflight evaluation, and will enable us to make minor text corrections to your files, such as keylines.

If you have any questions about these specifications, PDF, or the Prinergy workflow, please consult your Hung Hing Salesperson or your customer service representative.

Please note that Hung Hing's PDF guidelines are only nominally different from those of other suppliers using a PDF workflow. However, if you plan to use a different set of instructions for creating PostScript and PDF, we strongly urge you to submit a test file before submitting live job files.

Distiller settings

General

Select: Acrobat 4.0 (PDF 1.3) Compatibility

Deselect: Object Level Compression

Deselect: Auto-Rotate Pages

Select Binding: Left Select Resolution: 2400

Select: All Pages

Deselect: Embed Thumbnails
Width: 612 or Width: 8.5
Height: 792 or Height: 11
Units: Points or Units:Inches

Images

COLOR IMAGES

Select Sampling: Bicubic Downsampling

Pixels per inch: 300

Select Compression: JPEG Maximum

GRAYSCALE IMAGES

Select Sampling: Bicubic Downsampling

Pixels per inch: 300

Select Compression: JPEG Maximum

MONOCHROME IMAGES

Select Sampling: Bicubic Downsampling

Pixels per inch: 1200

Select Compression: CCITT Group 4

Select Anti-Alias to gray: Off









Fonts

Select: Embed All Fonts

Subset Embedded Fonts When Percent of Characters

Used is Less Than: 100%

Select When Embedding Fails: Cancel Job

Remove all fonts on the Always Embed and Never Embed lists

Color

Select Settings File: None

Select Color Management Policies: Leave Color Unchanged

Select Rendering Intent: Default

All Working Spaces options should be grayed-out

Select: Preserve Under Color Removal and Black Generation

Select Transfer Functions: Remove Select: Preserve Halftone Information

Advanced

Select: Allow PostScript file to override Adobe PDF Settings

Deselect: Allow PostScript XObjects

Select: Convert gradients to smooth shades Deselect: Create Job Definition Format (JDF) file Select: Preserve Level 2 copypage semantics

Select: Preserve Overprint Settings

Select: Overprinting default is nonzero overprinting Select: Save Adobe PDF Settings inside PDF file Select: Save original JPEG images in PDF if possible Deselect: Save Portable Job Ticket inside PDF file

Deselect: Use Prologue.ps and Epilogue.ps

Select: Process DSC comments Deselect: Log DSC warnings

Select: Preserve EPS information from DSC

Deselect: Preserve OPI comments

Select: Preserve document information from DSC Select: Resize page and center artwork for EPS files

PDF/X

All PDF/X options should be grayed-out

Deselect: PDF/X-1a
Deselect: PDF/X-A











Illustrator and InDesign settings

Creating a PDF from Illustrator CS

- 1) Open Illustrator document or eps file.
- 2) Select "SaveAs" from "File" Menu. Change format to "Adobe PDF (pdf)" and hit "Save" button.
- 3) Adobe PDF Options window will open. Preset will be "Custom". Highlight "General" from the left column. Change "Compatibility" to "Acrobat 4 (PDF 1.3). Deselect Preserve Illustrator Editing Capabilities and Embed Page Thumbnails, Optimize for Fast Web View should be checked in "Options".
- 4) Next highlight "Compression" from the left column.
 Change "Color Bitmap Images" to "Bicubic Downsampling To 300ppi for images above 450ppi".
 "Compression" to "Automatic (JPEG)" and change "Image Quality" to "Maximum".
 Make these same changes to "Grayscale Bitmap Images". For "Monochrome Bitmap Images", change to "Bicubic Downsampling To 1200 ppi for images above 1800ppi".
 "Compression" to "CCITTGroup 4".
- 5) Click the "Save Preset" button. A"Save Preset As" window will appear and you can name this preset as "HH's standard PDF". Click the "OK" button.
- 6) Now you will be able to select "HH's standard PDF" as a "Preset" and have all the settings we require for pdf. Select "Save PDF" to save the pdf.

Export PDF for Indesign CS

- 1) Select "Export" from "File" Menu. It will shows up the Export PDF dialog box, make sure the format is "Acrobat PDF" and hit "Save" button.
- 2) Check all the following setting in each tab.

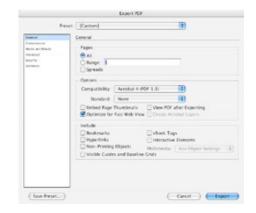
General

Pages : All Options :

Compatibility Acrobat 4 (PDF 1.3) Select "Optimize for Fast Web View"

Include : Deselect all

Compression







Color Images: "Bicubic Downsampling to" 300ppi for images above 450ppi Compression: "Automatic (JPEG)" and change "Image Quality" to "Maximum".

Make these same changes to "Grayscale Images".

For "Monochrome Images", change to "Bicubic Downsampling to"

1200 ppi for images above 1800ppi". Compression to "CCITTGroup 4".

And select "Compress Text and Line Art" only.

Marks and Bleeds

Marks: Crop Marks, Registration Marks,

Color Bars and Page Information should be checked.

Weight: 0.25 pt, Offset: 0.0833 inch.

Bleed and Slug: Bleed should be 0.125 to 0.25 inch.

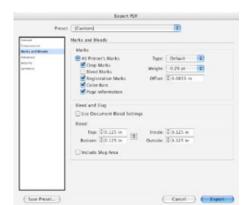
Advanced

Color: Leave Unchanged

Fonts: Subset fonts is less than [100%] Transparency Flattener: [High Resolution]

Security

Deselect all at Security Tab.



- 3) Click the "Save Preset" button. A"Save Preset As" window will appear and you can name this preset as "Hung Hing's standard PDF". Click the "OK" button.
- 4) Now you will be able to select "Hung Hing's standard PDF" as a "Preset" and have all the settings we require for pdf.
- 5) Hit "Export" button.

*If you using the newer version of Adobe Products (Acrobat 8-9, Adobe CS3, CS4, CS5), you can simply choice the [Press Quality] [PDF/X-1a] Preset to generate PDF easier.

PDF supply for co-edition books

(versioning / late-black workflows)

For each page inside a co-editionable publication will supply two kinds of PDF files. These will be one CMYK PDF/X-1a:2001 plus one composite Translatable Black PDF1.4.





CMYK PDF/X-1a:2001

This composite PDF file contains all CMYK coloured graphic/picture elements which are common to all language editions. No graphic elements specific to any one edition (e.g. text) will be included in this PDF. The output intent (ICC Print profile) embedded in this PDF/X-1a:2001 is 'ISO Coated' based on the FOGRA 39 characterisation data set.

BLACK LANGUAGE EDITION PDF1.4

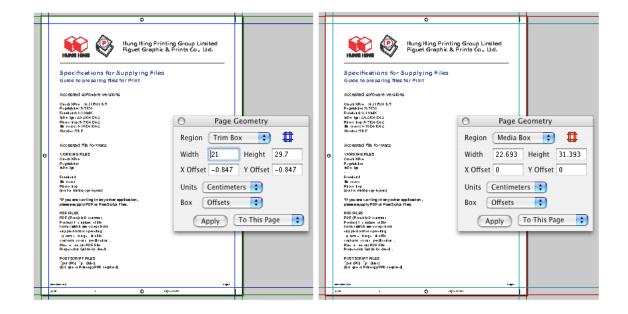
This PDF file contains all the text and graphics unique to each language edition, (e.g. UK, US, French & Italian), in order to allow a single black plate change between editions. **No CMYK common colour elements are included in this PDF.** No white masks will exist in this PDF. Graphic elements inside this PDF will be coloured Process Black and set to Overprint.

No. of pages per PDF file

The number of pages per PDF file may vary from title to title. Some PDF's may be supplied containing multiple pages and others may include one page per document. PDF's will always be supplied as single pages and not spreads. There may be some instances whereby the printer receives a four page composite CMYK PDF/X-1a for pages 1-4 and the corresponding Black language edition PDF1.4, for pages 1-4, is supplied as four individual PDF's.

Media Sizes

PDF's will always include a 'Trim Box' which defines the correct trimmed page size. Although the 'Trim Box' will remain at a consistent size for the same publication, the 'Media Box' may vary in size. The 'Trim Box' should therefore be used as a reference point when combining colour and text PDF's. Media Box sizes should remain at a consistent size for any one edition, but between editions the Media Box size may vary.





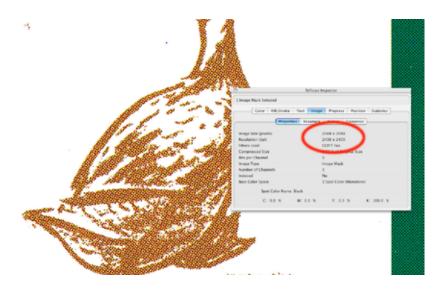


Raster PDF

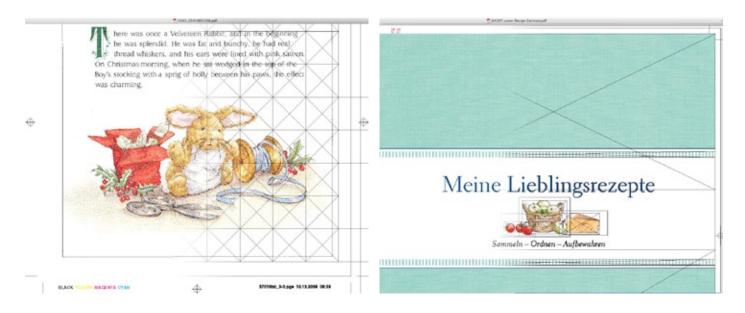
Although vector PDF files are preferred, raster PDF files (example: PDF2Go, CopyDot) will be accepted. The Line Work (Bitmap) resolution for Raster PDF files must be **2400dpi**. The Continuous Tone (CT) resolution for Raster PDF files must be **300dpi**.

Compression: CCITT Fax

Please contact us in advance if you need to submit a Raster PDF file.



Raster PDF resolution must be 2400dpi



Raster PDF file

Vector PDF file





Proofs

Digital proofs

HH use GMG Color Management System in color management of the digital proofing process. GMG Color Proof is used to create the color profile for each printing machine in order to standardize the color quality of the printing. The quality of digital proof is examined by using GMG Proof Control. All of these workflows are controlled by ISO 12647-7 Standard.

By contract proofs is meant proofs which can be used to check colour tones. The proof is made on a proofing machine calibrated for print quality (e.g. Epson 9880). Along with the proofs come quality control elements, which can be used to measure the colour tones, dot gain and overprint values of the print. We require the use of quality control elements.

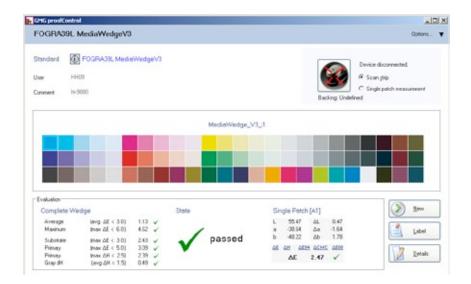
HH prefer using Fogra MediaWedge Eye1 control strip.

If you are supplying digital proofs to us, for accurate colour matching on press please contain Fogra MediaWedge v2 or v3 (ISO-12647 standard).

PLEASE NOTE!

With contract proofs the following limitations may be encountered:

- It is not always possible to predict the influence on print quality of the different paper used in the printing.
- It is not always possible keep the final printed product identical to the proof as far as all colour tones are concerned.
 (e.g.: Metallic color and bright Fluorescent color.)
- The digital proof technique does not produce halftone dots, moiré effects caused e.g. by difficult textile patterns might not be reproduced on the proofs.







Press Proof

A press proof is printed using the actual files, paper, inks and printing press specified for the job. A press proof is used to verify images, tonal values, colors, content and position. Because it involves setting up the job and printing to actual specifications, it is normally done when color is very critical. Our policy is to match spot colors to the appropriate swatch book and cmyk to industry accepted pleasing color, such as ISO standard states below.

HH using **pressSIGN** software measures and controls the printing process to makes it easy to run the international printing standards - ISO 12647-2, GRACol G7.

If you have your own color standard, please contact your Customer Service Representative for a quote, and please supply more information to us.

