

PREPRESS: Digital Data

2013



Current PDF-information
for download on our website:
www.leykamletsprint.com

Why PDF/X?

PS via PDF export and PDF via PDF export with QuarkXPress 8.x/9.x

PostScript + direct export with InDesign CS5/CS6

Acrobat-Distiller – settings for Acrobat-Distiller 9/X

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Why PDF/X?

Why PDF/X – Advantages of PDF/X

A PDF/X file is a standard PDF file which includes certain minimal requirements on printing templates. This means that embedded images and fonts, contour trapping information, trim box and output intent are clearly defined.

Imagine PDF/X as a checklist with various requirements the file has to meet before turning into a PDF/X. If specific requirements are met, the PDF can be saved as a PDF/X file.

ATTENTION: Other potential errors within the PDF file can only be detected by checking and re-checking. A PDF/X file does not automatically guarantee a faultless PDF file!

Checklist for PDF/X1a files:

- All used fonts have to be embedded or at least all used signs must be included as part of sub-groups.
- Image data/images must be included in the PDF without any links or OPI comments.
- CMYK and spot colors are allowed, while RGB and CIE-Lab colors are not.
- Comment or form fields are not allowed within the bleed box.
- The bleed box and the trim box need to be defined.
- ZIP or JPEG compressions are allowed; LZW compressions do not work.
- Output intent: setting the printing conditions of the respective PDF file.

What are the differences between PDF/X-1a, PDF/X-3 and PDF/X-4?

PDF/X-1a, PDF/X-3 and PDF/X-4 are the most commonly used PDF/X types at the moment. The main difference between them lies in the fact that, with PDF/X-3 files, not only CMYK or spot colors can be

used, but also device-independent contoured color spaces. In addition, PDF/X-4 also accepts natively transparency.

PDF/X-1a:2001 – only includes CMYK and spot colors based on PDF 1.3

PDF/X-1a:2003 – updated version of PDF/X-1a:2001 based on PDF 1.4

PDF/X-3:2002 – supports in addition to CMYK and spot colors also RGB, Lab und ICC-based colors based on PDF 1.3

PDF/X-3:2003 – updated version of PDF/X-3:2002 based on PDF 1.4

PDF/X-4 – is the new standard based on PDF 1.6. In addition to CMYK and spot colors, PDF/X-4 also supports RGB, CIE-Lab and ICC-based colors as well as natively transparency. *Always provide PDF files including real transparencies and RGB images or spot colors only after consultation!*

How to create PDF/X files

Current programs such as Adobe InDesign starting with version CS2 or QuarkXPress from version 6.5 onwards are already able to create PDF/X files directly.

ATTENTION: During the PDF export, transparency, layers or ICC profiles may be unwillingly included in the PDF file. These can lead to serious problems in pre-press.

The following pages describe the usual way from “PostScript – Distiller – to PDF” as well as the “direct export” with current programs.

PS via PDF export with QuarkXPress 8.x/9.x

Creating PS files with XPress 8.x and 9.x

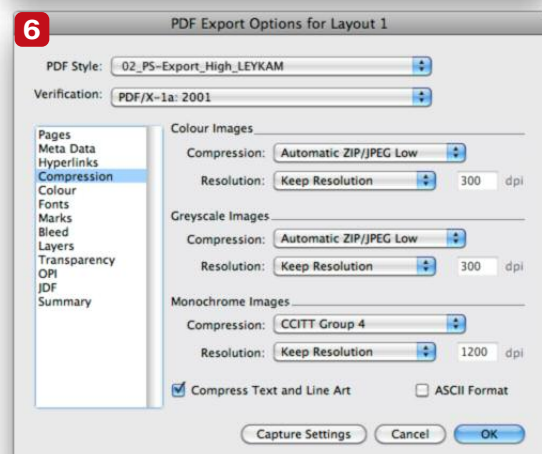
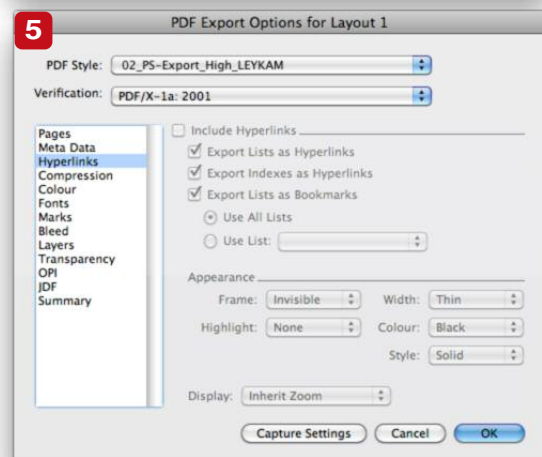
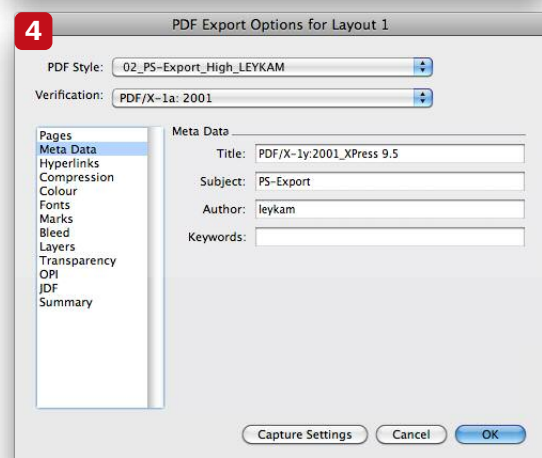
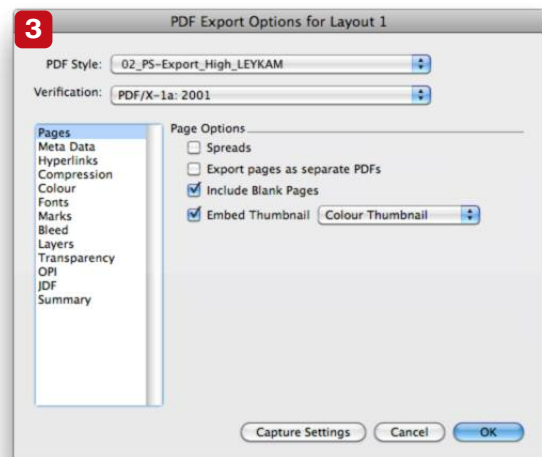
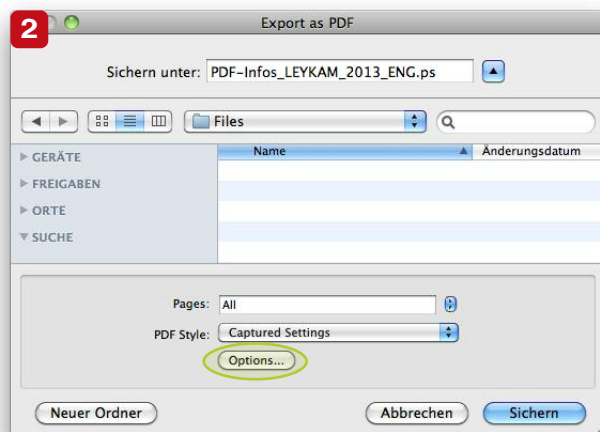
The quality of the exported PostScript files is clearly higher than those produced by means of the Printing mask. This particularly concerns the creation of the trim box.

PS export

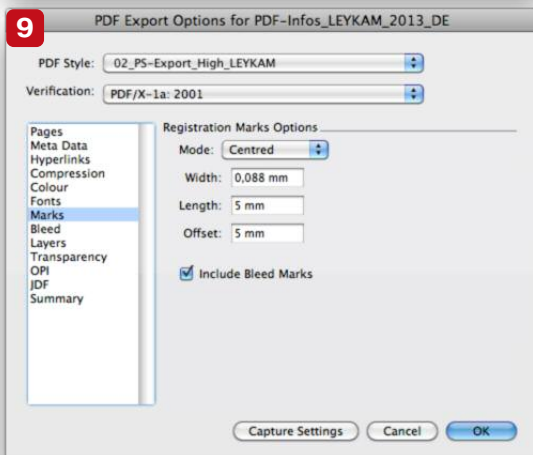
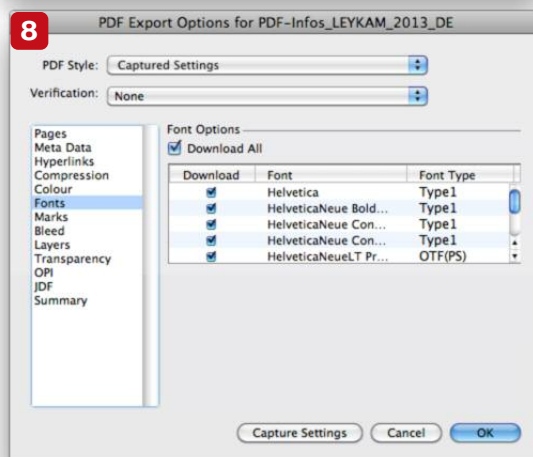
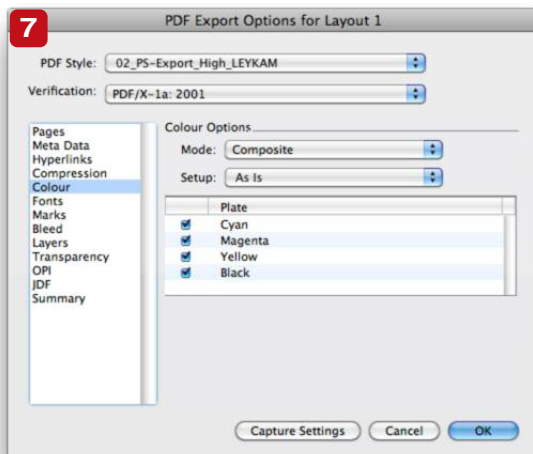
In the menu “QuarkXPress”>“Preferences” (1):
Select “PDF” from the list on the left and check
“Create PostScript File for Later Distilling”.



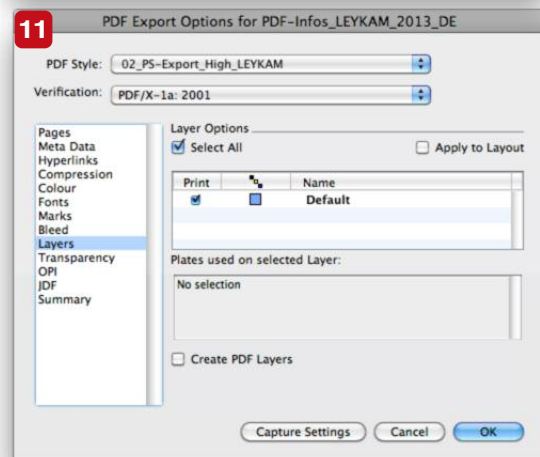
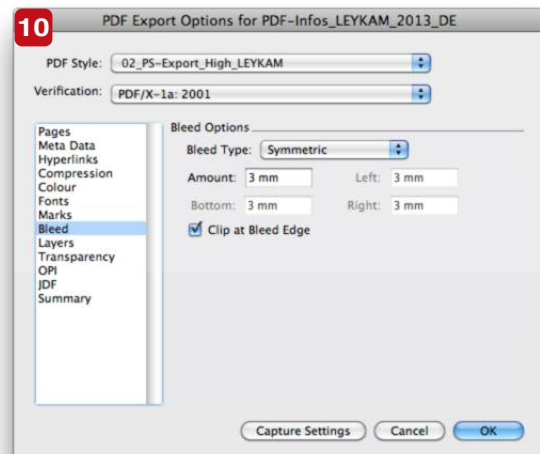
In the menu “File”>“Export”>“Layout as PDF...” (2);
Check the following settings under “Options...”:



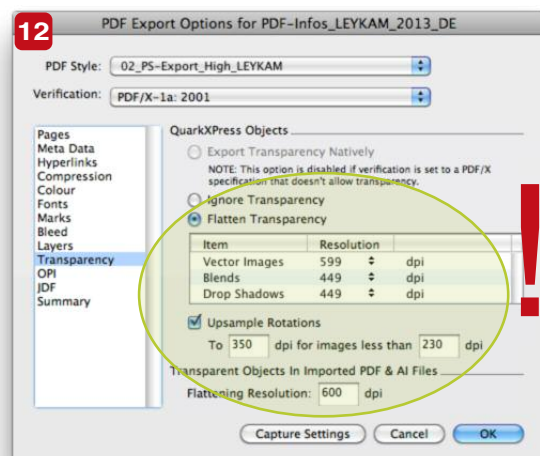
PS via PDF export with QuarkXPress 8.x/9.x



During export, XPress embeds fonts (8) only as sub-groups by default. This goes without problems. However, changes in the texts are more time-consuming in the PDF file.



If you made use of transparency options, you **have to** select “Flatten Transparency” (12) in order to **flatten the transparency!** Please adopt the following settings:



It is recommended that no settings be checked in OPI and JDF. **Then save the PostScript and distill it with Acrobat-Distiller as shown on page 11 and the following!**

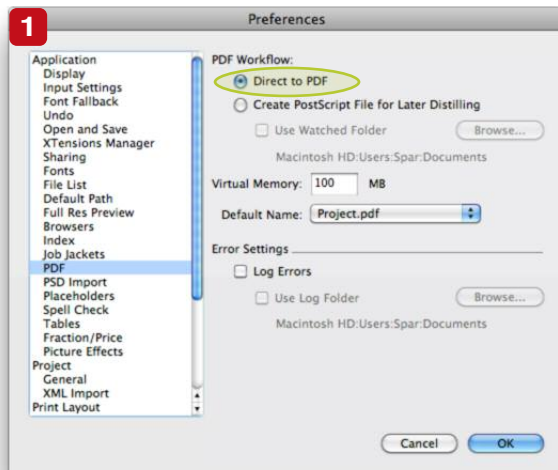
PDF via PDF export with QuarkXPress 8.x/9.x

Creating PDF files directly via PDF export in QuarkXPress 8.x und 9.x

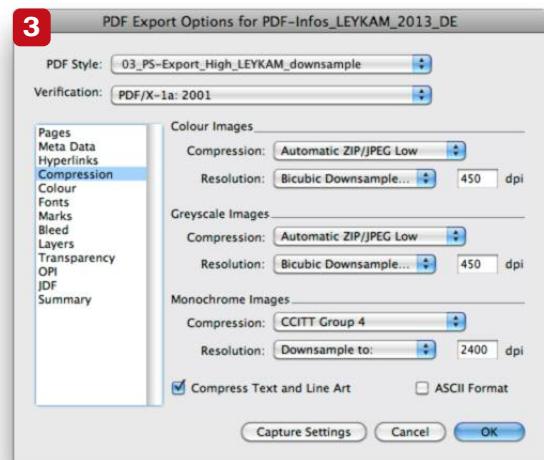
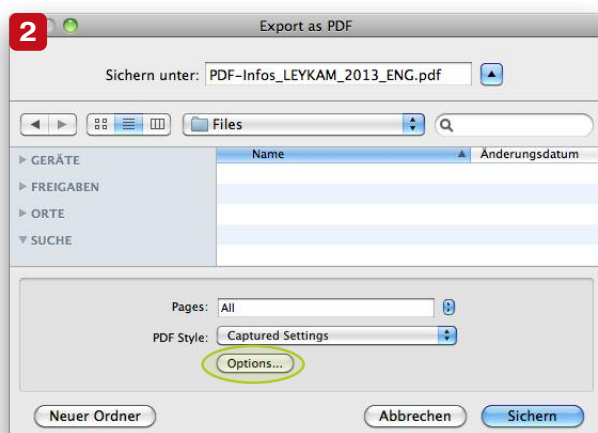
As already mentioned above, it is always recommended to create a PDF file with Acrobat Distiller. If you do not have Acrobat Distiller, QuarkXPress also offers the possibility of a direct PDF export.

PDF export

In the menu “QuarkXPress”>“Preferences” (1): Select “PDF” in the list on the left and select “Direct to PDF”.



In the menu “File”>“Export”>“Layout as PDF...” (2); Check the following settings under “Options...” as indicated on pages 3 and 4 with exception of the compression settings (3) shown in the image.



With direct to PDF export, the compression of images is recommended in accordance with the necessary quality in order to reduce the amount of data. The settings depicted in the screenshots reduce all images with 450 dpi or higher to exactly 450 dpi.

Xpress consequently creates an invisible PostScript file, which is then converted into a PDF file by the internal Jaws Engine. Many processes create “good” PDF files, while complex constructions and designs including shadows and/or rotated images can cause more complex PDF files, which may not be printed correctly.

Successfully (!) evaluated PDF files created by PDF via PDF export contain:

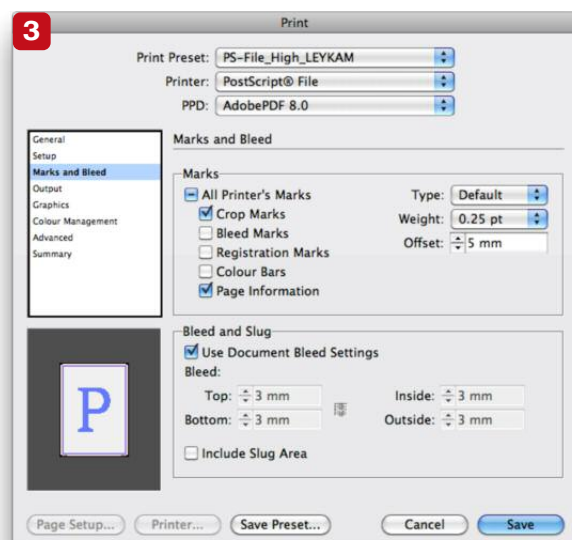
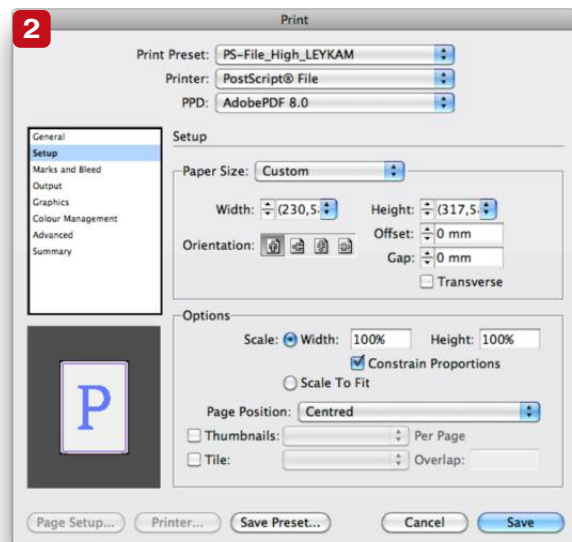
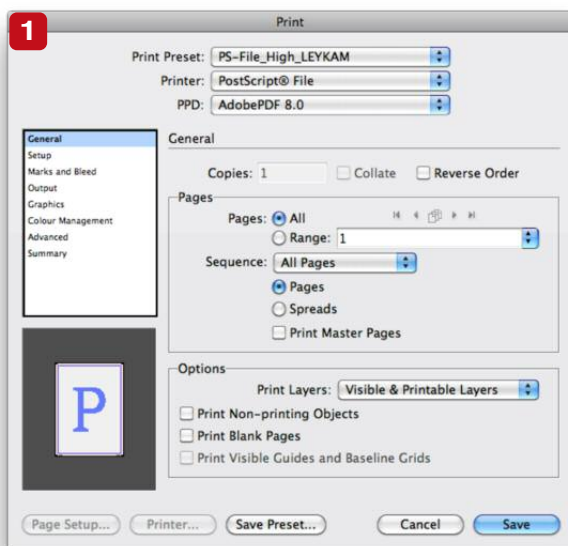
- the PDF/X stamp
- all fonts
- only CMYK and/or spot colors, but no RGB or CIE-Lab colors
- a valid trim and bleed box
- Output intent
- contour trapping information “None”
- no transparencies
- images defined by dpi with varying resolution

PostScript export with InDesign CS5/CS6

Creating PS files with InDesign CS5

Although InDesign CS offers two possibilities for direct export to PDF files, it is nevertheless recommended to use Acrobat Distiller.

In the mask “Print” and the menu item “General” (1) you can select “PostScript” as Printer and “Adobe PDF 8.0” as PPD.

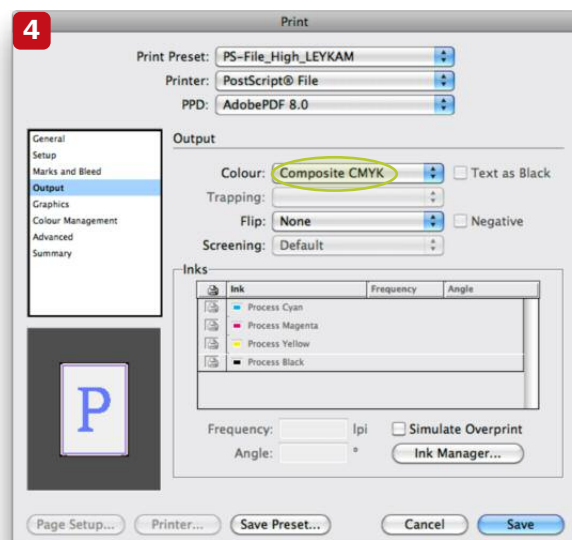


Print Setup

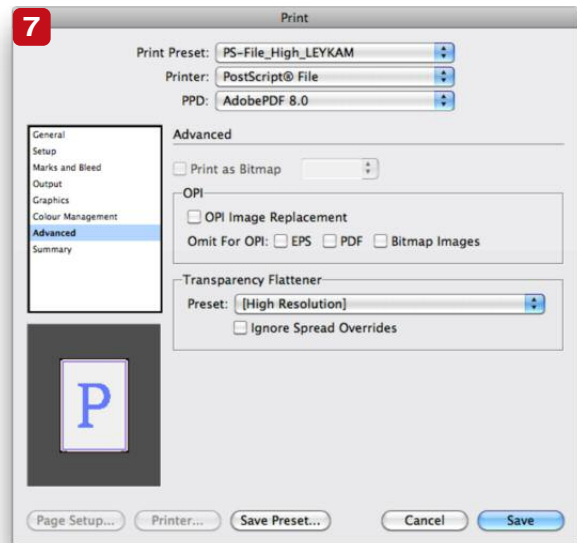
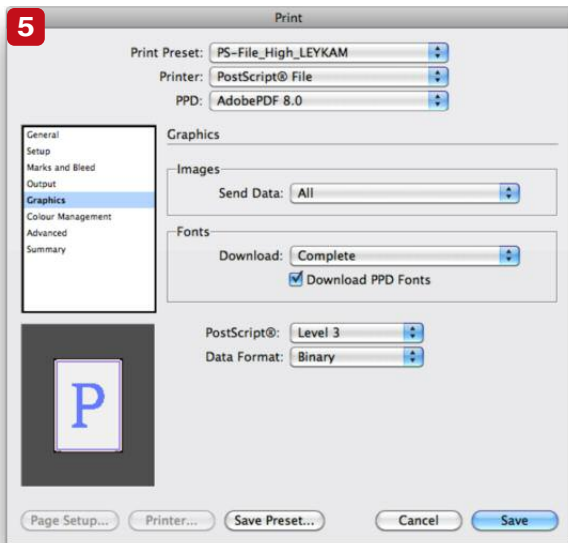
Please adapt your settings to the ones depicted in the screenshots below.

Paper size and orientation (2): Select “Custom” for paper size and “Centred” for page position. The marks (3) are defined by bleed settings of 3 mm for the whole document.

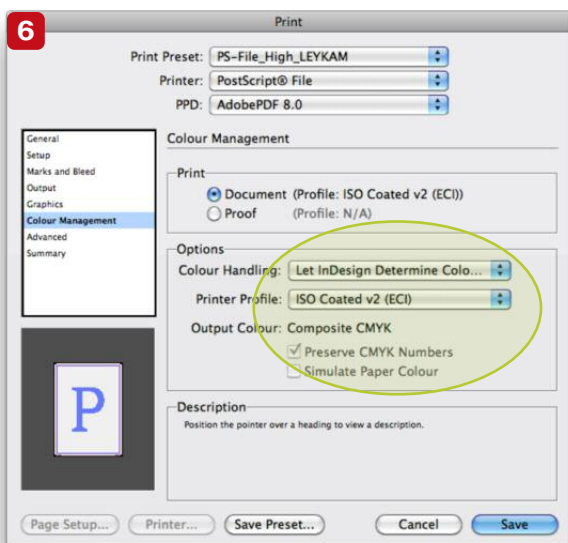
Select “Composite-CMYK” in Output (4), even if spot colors are used because these are included in the PostScript file. If you do not use any spot colors, we recommend converting them into CMYK colors.



PostScript export with InDesign CS5/CS6



Under “Colour Management” (6)+(7) choose the appropriate print profile for your document. Please check all the Colour Management settings if CMM is active.



ATTENTION! “Preserve CMYK Numbers” (6) ensures that no unwilling CMYK to CMYK conversion occurs.

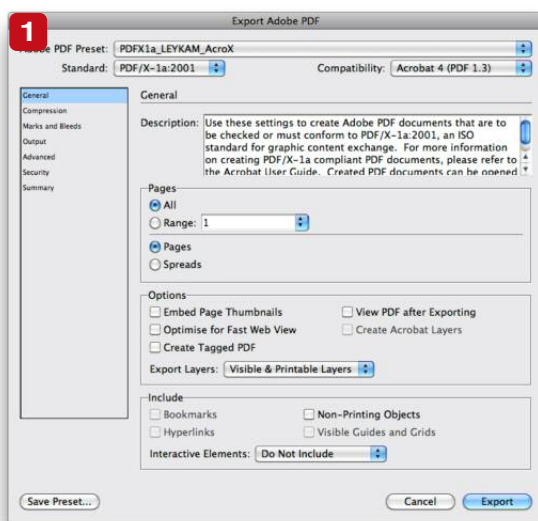
After that, save the PostScript and distill it with Acrobat-Distiller. Recheck and revise everything once again with Preflight.

Direct to PDF export with InDesign CS6

PDF files can easily be created by the Distiller with InDesign from version CS2 onwards.

Direct to PDF Export with InDesign CS6

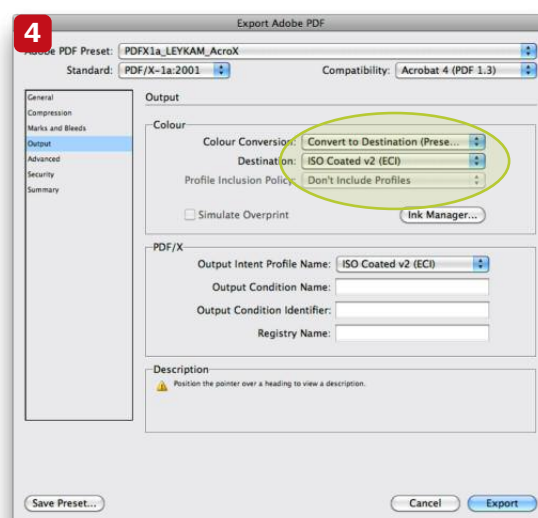
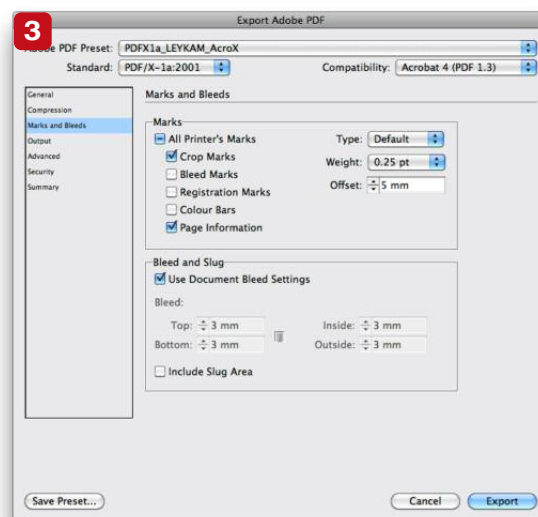
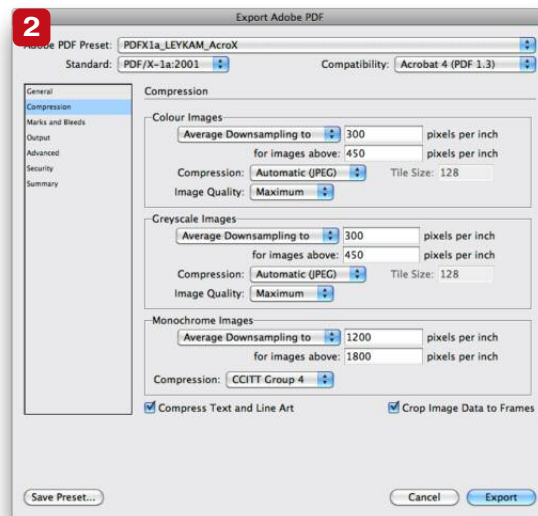
Please select “High Quality Print” as Adobe PDF Preset (1) and adapt your settings to the ones depicted in the screenshots.



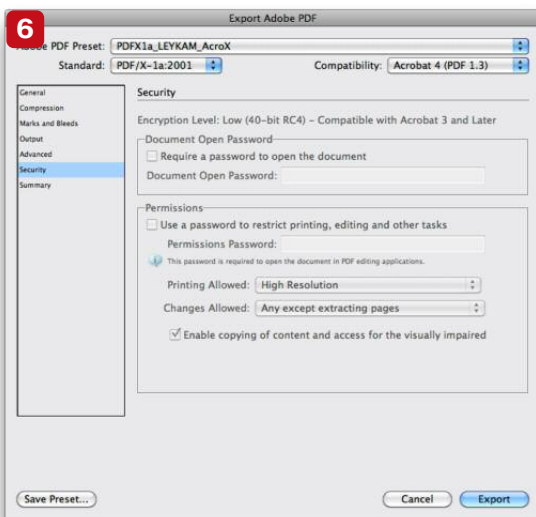
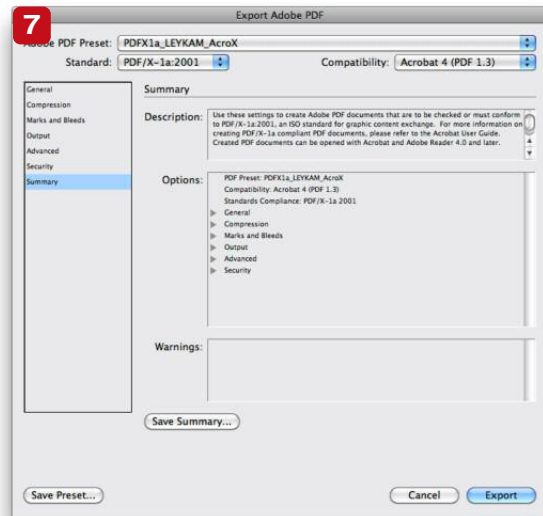
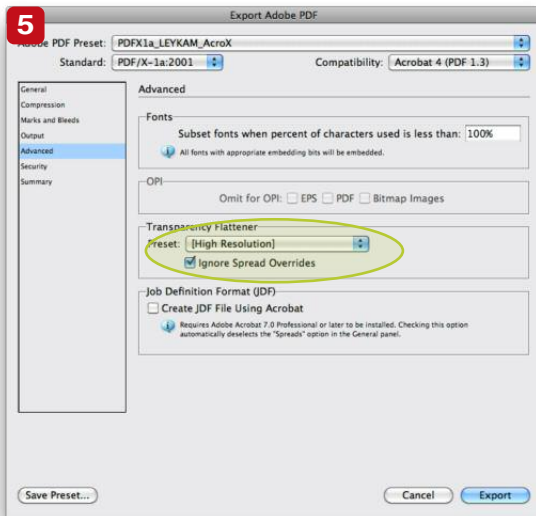
In the menu “Compression” (2) you can select JPEG if necessary. In this way, images are compressed more effectively (see page 8) than they are with the ZIP compression.

Only if you define “Acrobat 4 (PDF 1.3)” (1) in the Compatibility field are the transparencies flattened in InDesign.

If you work with activated CMM, you should adapt the “Colour” menu (4) and select “Don’t include Profiles” in the “Profile Inclusion Policy”, otherwise InDesign attaches ICC profiles to all objects.



Direct to PDF export with InDesign CS6



Recheck all PDF files with Preflight after the export.

Adobe Acrobat Distiller – Settings 9/X

Acrobat Distiller 9/X:

On the following pages, we will describe the recommended Distiller job option settings you should use if you work with Acrobat Distiller to convert to PDF. Please reconfigure the menu “Distiller” > “Settings” according to our recommendations shown in the screenshots and save these settings. Alternatively, you can download our latest job option settings from our FTP server.

Latest PDF information & downloads

ftp://nt.leykam.si

user: gast

password: gast

In this folder, you will find all necessary job options in the form of ZIP files to create PDF/X-1a files.

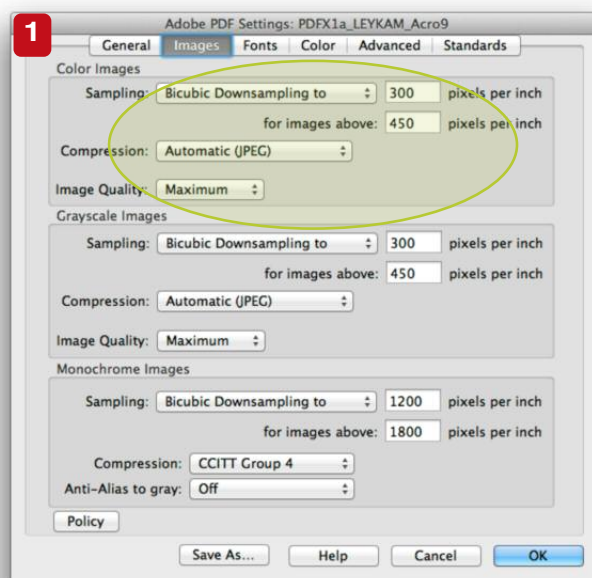
Please note:

Bicubic Downsampling, yes or no?

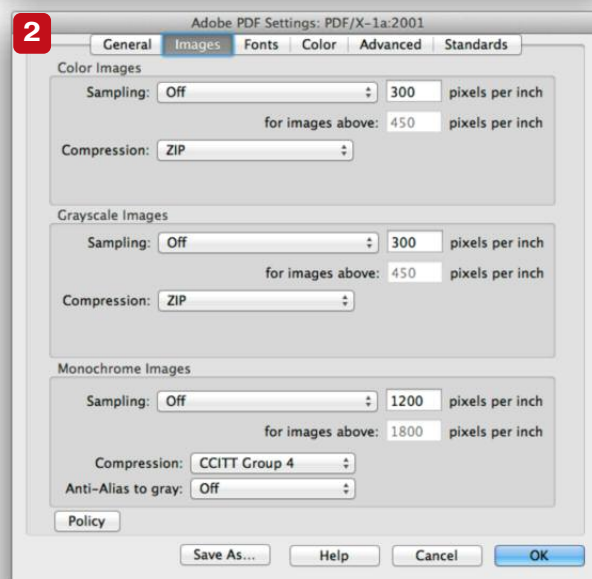
We adjusted the settings “Sampling” to “Bicubic Downsampling to” (1) with specific figures.

The “Bicubic Downsampling” with colour and grey-scale images needs to be set to **300dpi** for colored and **1200dpi** for monochrome images, respectively. These figures are sufficient for further processing and printing as they have the advantage of a small amount of data.

On the other hand, they may cause pixelated results due to loss of data, particularly with re-digitalized data or line art scans, which need high resolution.



▼ ▼ ▼ or ▼ ▼ ▼

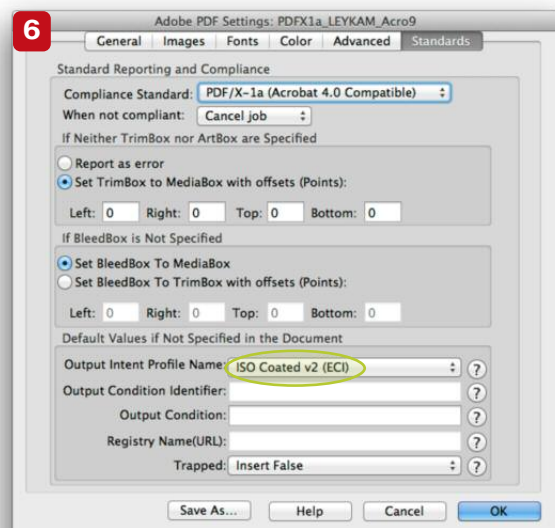
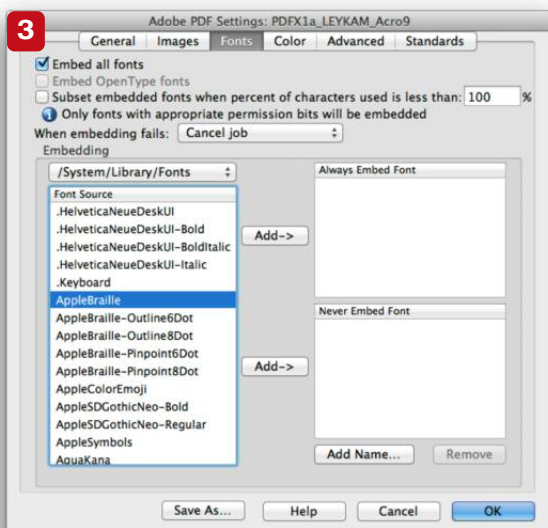
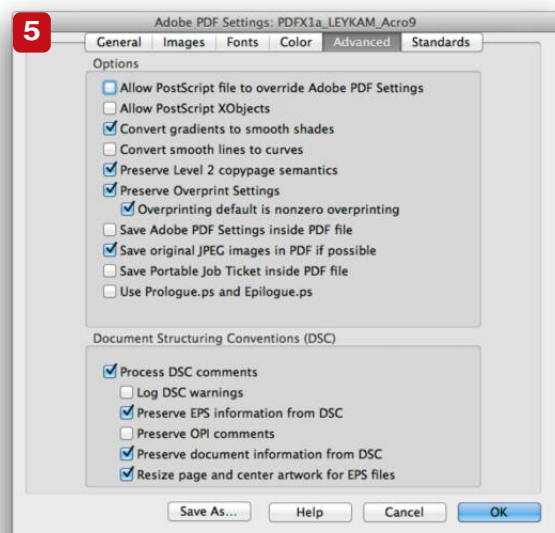
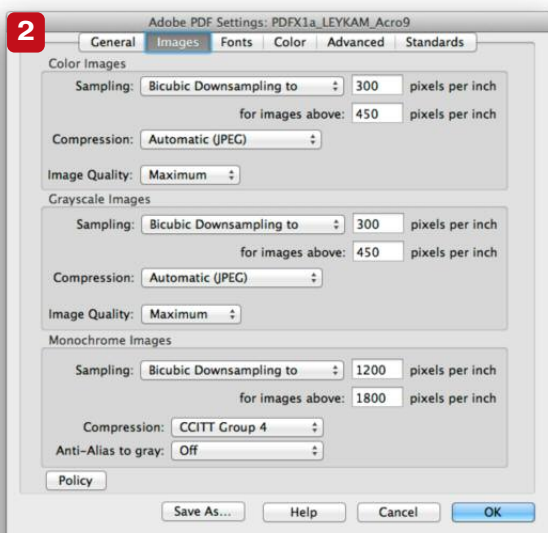
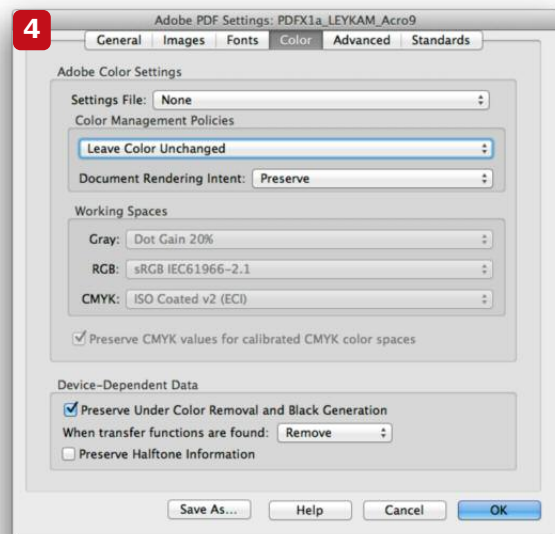
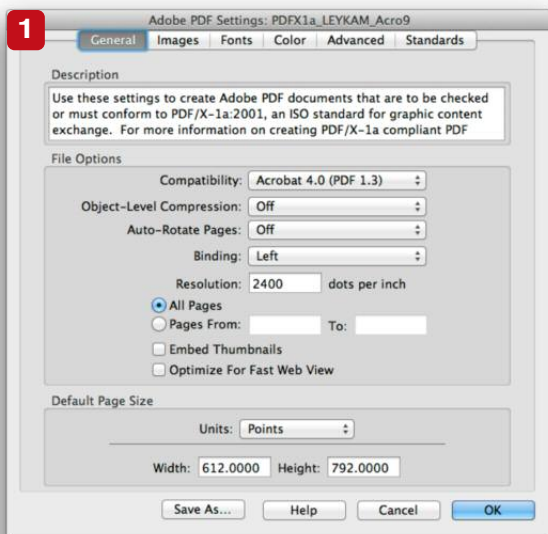


For this reason, we recommend checking and revising your work in advance and, if necessary, adapt the settings according to the requirements.

ZIP or JPEG compression?

ZIP instead of JPEG compression! (2) In this case, quality and manageability have to be balanced (smaller amount of data with JPEG compression vs. larger amount of data with ZIP compression).

Adobe Acrobat Distiller - Settings 9/X

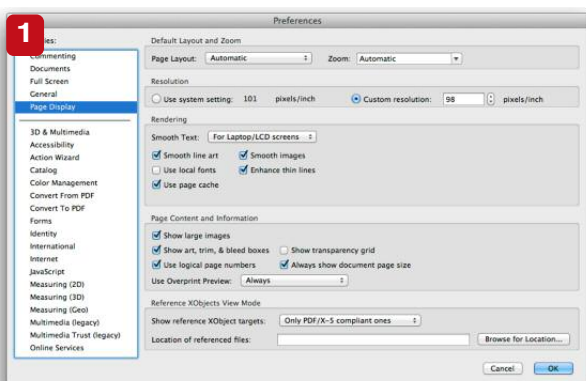


PDF check in Adobe Acrobat X

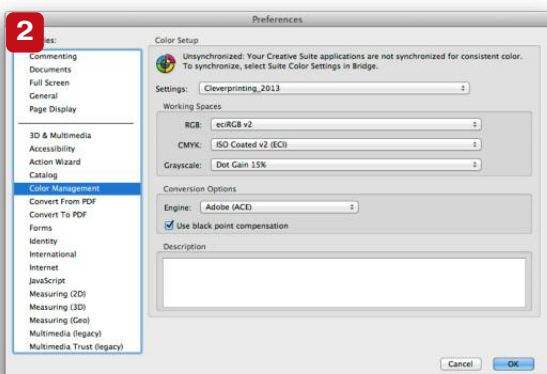
In general, we recommend checking and revising all created PDF files with Acrobat. Please adopt the following default settings.

Basic settings

In the menu “Acrobat” > “Preferences” > “General” > “Page Display” copy the settings as shown in the illustration (1) below.



The feature “Use local fonts” has to be deactivated, otherwise embedded fonts will be missing in further processing, even if they are correctly displayed. The Color Management settings (2) are very important in case you have to convert colors with Acrobat (as with RGB images, for instance). If you encounter errors or mistakes, they always have to be corrected in the original file!

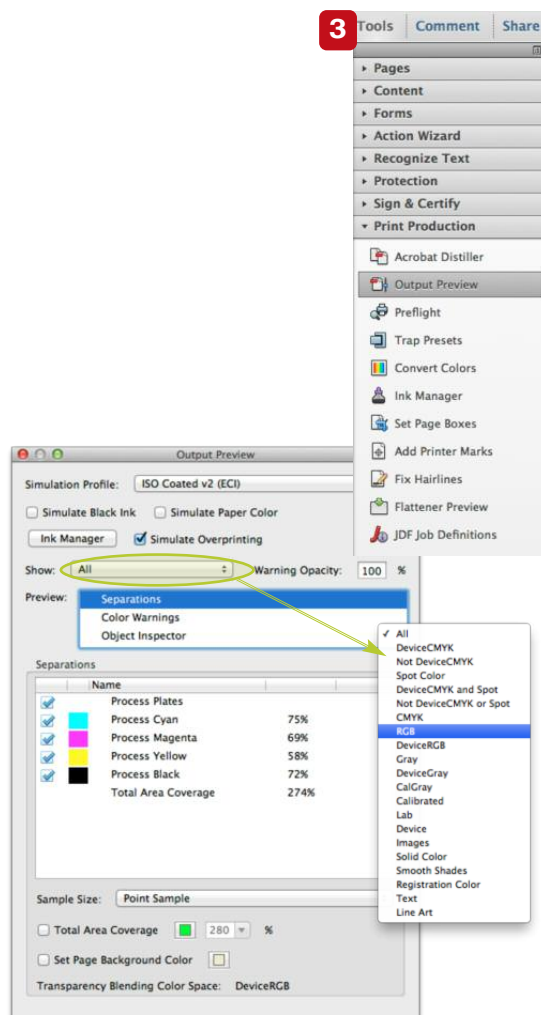


1. Checking the Output Preview

In the Acrobat menu “Tools” > “Print Production” (3) click on the second item “Output Preview”.

Here you can see which colors are currently used in your document. In the tab “Separations”, you can choose which colors are displayed to see whether they are RGB or spot colors.

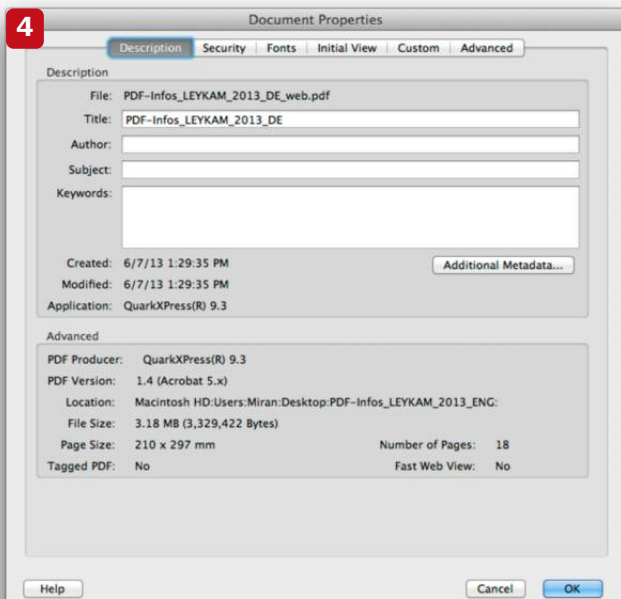
If nothing is displayed in the “Not DeviceCMYK” preview, then your data is suitable for printing as far as colors are concerned.



PDF check in Adobe Acrobat X

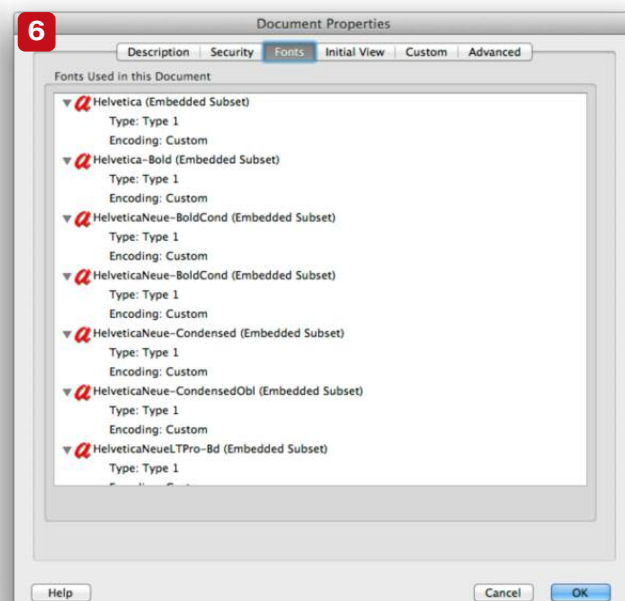
2. Checking Document Properties

In “Document” > “Document Properties” > “Description” (4) you can find additional information on the title, date of creation, date of last modification, and the PDF producer.



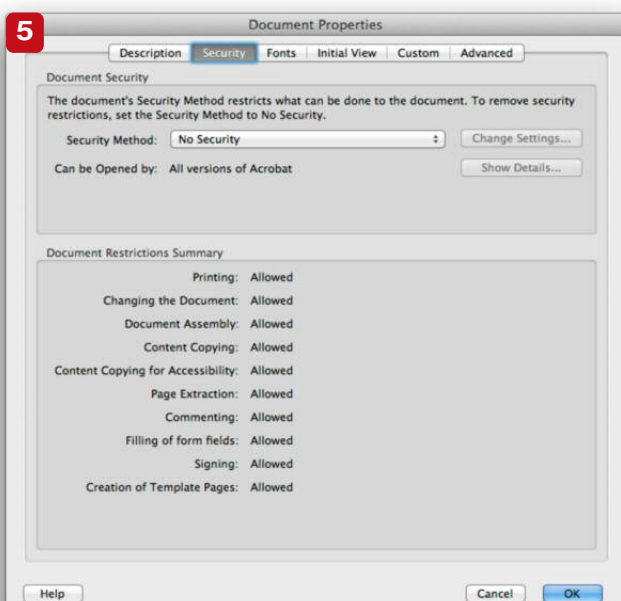
Embedded fonts

In the tab “Fonts”, you can check whether all fonts used in the document are embedded correctly (6). The feature “Embedded Subset” refers to the fact that only used signs are embedded, which is no problem for printing, but corrections of the text may not be accepted afterwards.



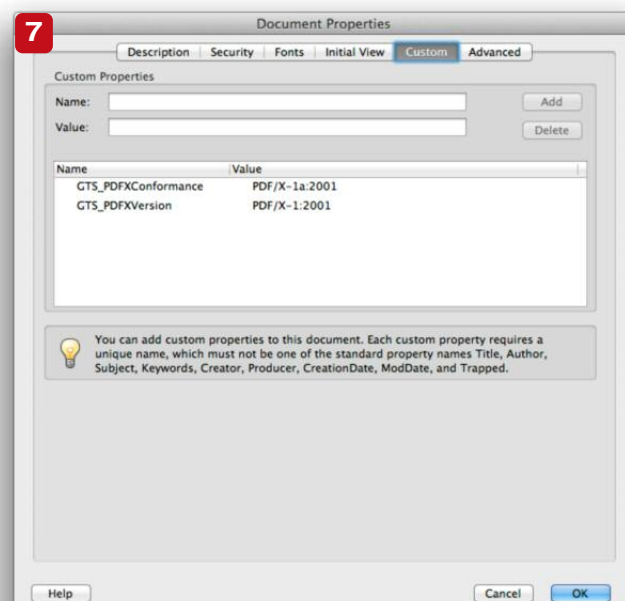
Security

Please note that your created PDF files do not have security restrictions (5), otherwise your files cannot be processed further.



Information of the PDF/X version

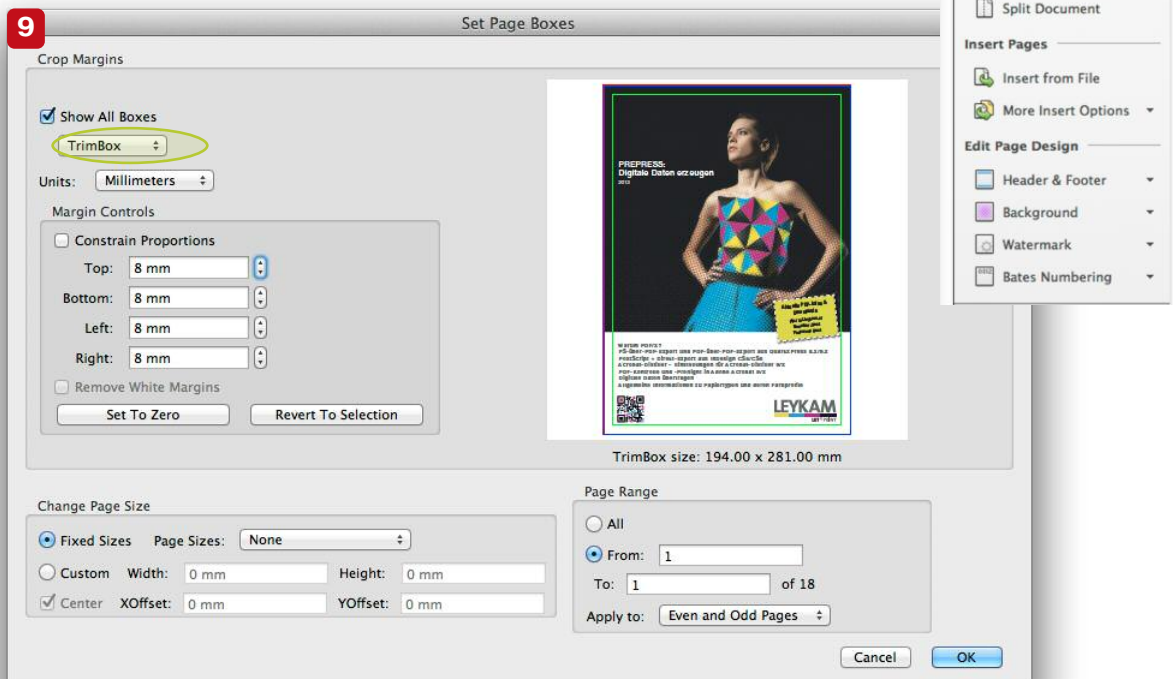
In the tab “Custom” (7), you will find information on the properties of your PDF file.



PDF check in Adobe Acrobat X

3. Checking the Page Size and Margins

In the menu “Tools” > “Pages” > “Crop” (8) you can tick “Show All Boxes”. If you activate “TrimBox”, the margins as well as page size and range can be read and altered (9).



PDF Preflight Check in Adobe Acrobat X

4. Checking with Preflight feature

Adobe Acrobat offers multiple pre-defined preflight profiles which can be used to check PDF files for errors and to make corrections before printing. It is not recommended to use the Fix-Up feature as it often causes more errors than it detects!

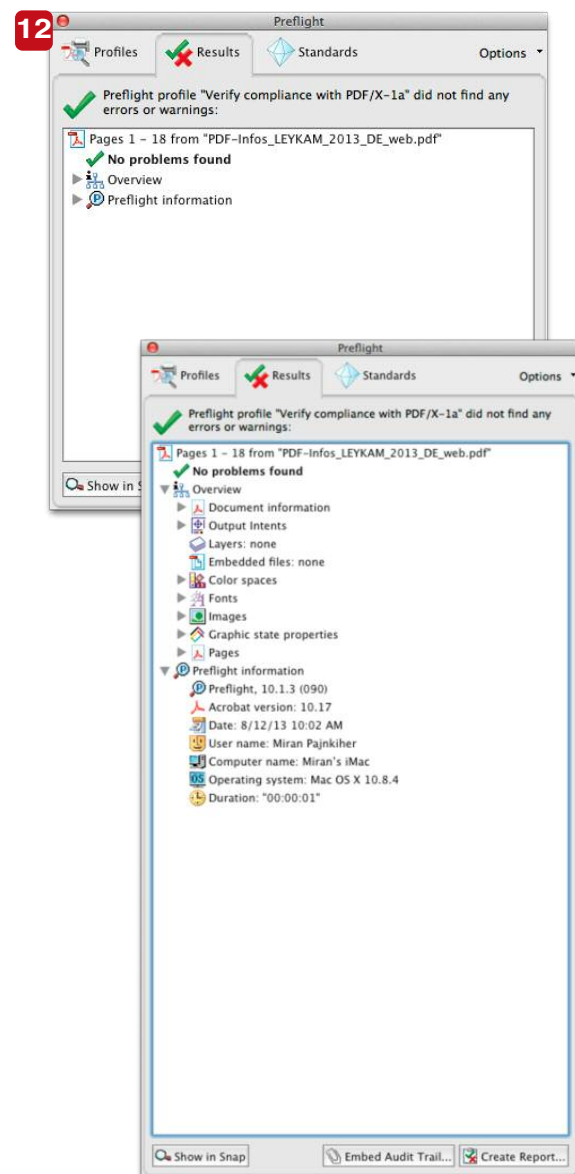
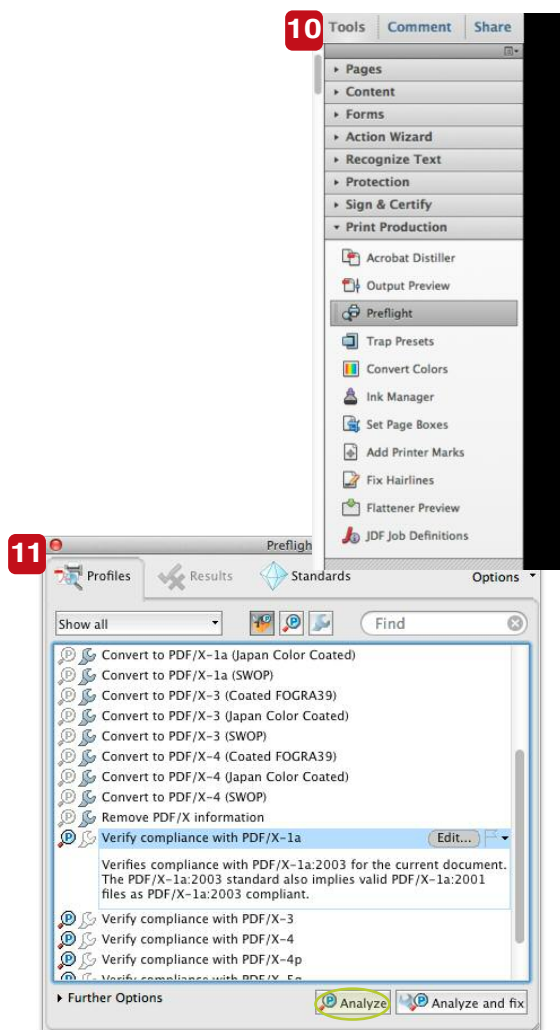
In general, we recommend the correction of errors always be made in the original file!

Preflight Check with Acrobat X

Please click on “Preflight”(10) in the tool bar.

You can check the compatibility with PDF/X1a if you select “Verify compliance with PDF/X-1a” (11).

In this way, relevant parameter for printing including for example image compression, colors, page size, fonts and ICC profiles are being checked (12).



Please ensure that your file is only being analysed!

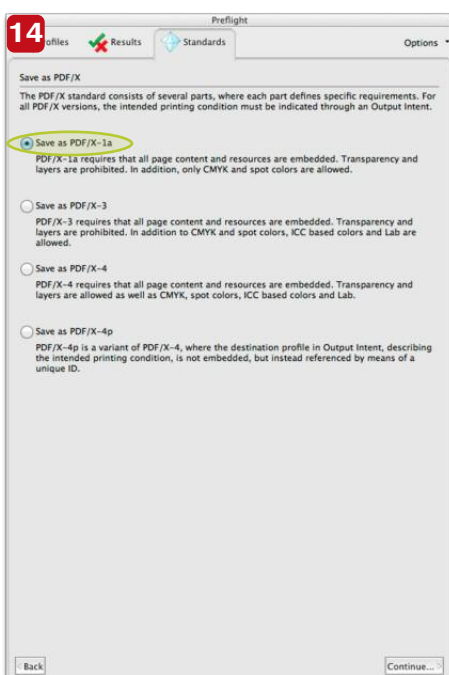
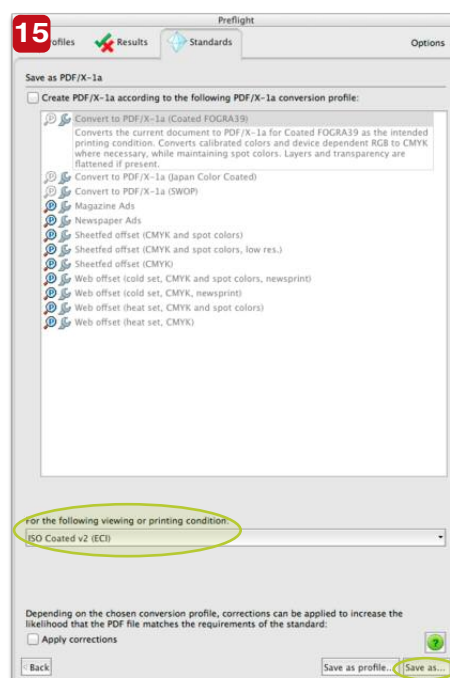
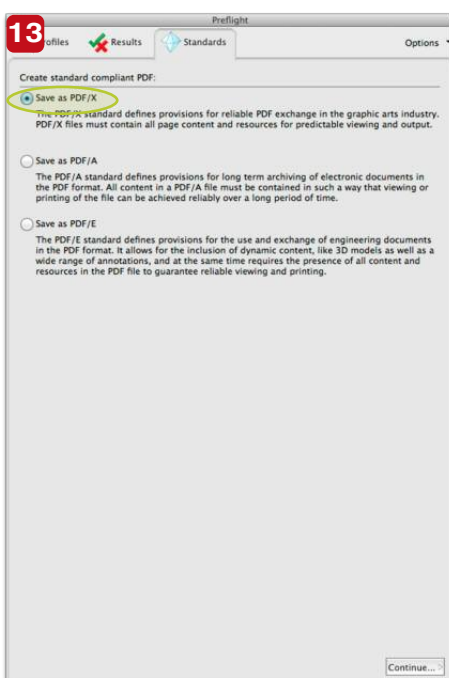
PDF Preflight Check in Adobe Acrobat X

Achieving PDF/X Conformance

In case you do not yet have a PDF/X file, you can find this feature in the tab “Standards”(13).

Clicking on “Continue...”, the PDF/X version (14) can be chosen. “For the following viewing or printing condition” refers to the “Outputintent”, which shows the selected printing process of your document (15).

Save the document as a PDF/X-1a selecting “Save as ...”. After another revision, the document will then become a PDF/X (16).



Transferring digital data

Current PDF-information
for download on our website:
www.leykamletsprint.com

In order to transfer your data to our FTP server, you need a user name and password which can be requested from our staff of the respective pre-press.

Please transfer your data within a folder with the distinct and correct designation!

Every data transfer on your part should be accompanied by a control printout!

In case we do not obtain printouts, we will provide a rendered PDF file for inspection to ensure the correctness of the document. Our clients will receive an email containing a link for all further information concerning the clearance of the print release.

For this reason, we kindly ask our clients to always enclose an email address.

E-Mail

Neudörfl/Müllendorf: ctp.neudoerfl@leykamletsprint.com

Maribor/Hoče: ctp@leykam.si

Břeclav: osvit@moraviapress.cz

FTP

Request user name and password!

Neudörfl: <ftp://ctp.neudoerfl.leykamletsprint.com>

Maribor/Hoče: <ftp://nt.leykam.si>

Břeclav: <ftp://ftp.moraviapress.cz>

FAX

Neudörfl/Müllendorf: +43/(0)5/9005-3517

Maribor/Hoče: +386/(2)/61655-40

Břeclav: +420/516 205 204

If you have any problems with data transfer or questions, do not hesitate to contact our staff:

TELEFON

Neudörfl/Müllendorf: +43/(0)5/9005-3317, 3319

Maribor/Hoče: +386/(2)/61655-27, 93

Břeclav: +420/516 205-190, 230

For further technical information and queries regarding image creation, data transfer or the creation of PDF files with other programs, please contact our pre-press specialists in Neudörfl, Tel. +43 (0)5/9005-3317, 3319.

General information on type of paper and color profiles

Paper type and color profiles by ISO 12647-2

PT	Paper type/Description	Grammage	GT	IC	Profile	Charact.	Year
1/2	(1) glossy coated, white, woodfree (2) matte coated, white, woodfree	115g/m ²	AM	330	ISO Coated v2 (ECI)	FOGRA39	2007
1/2		115g/m ²	AM	300	ISO Coated v2 300 (ECI)	FOGRA39	2007
1/2		115g/m ²	NP/FM	300	PSO Coated NP 300 ISO12647 (ECI)	FOGRA43	2008
1/2		115g/m ²	NP/FM	330	PSO Coated NP 330 ISO12647 (ECI)	FOGRA43	2008
3	glossy coated LWC	70g/m ²	AM	300	PSO LWC Improved (ECI)	FOGRA45	2009
3		70g/m ²	AM	300	PSO LWC Standard (ECI)	FOGRA46	2009
4	uncoated white, Offset	115g/m ²	AM	300	PSO Uncoated ISO12647 (ECI)	FOGRA47	2009
4		115g/m ²	NP/FM	300	PSO Uncoated NP ISO12647 (ECI)	FOGRA44	2008
5	uncoated yellowish, Offset	115g/m ²	AM	320	ICO Uncoated Yellowish	FOGRA30	2004
SC	super-calandered		AM	270	SC Paper (ECI)	FOGRA40	2007
MFC	machine-finished-coated		AM	280	PSO MFC paper (ECI)	FOGRA41	2008
SNP	standard-news-print		AM	260	PSO SNP paper (ECI)	FOGRA42	2008

Explanation of abbreviations: PT: Paper type; GT: Grid-type; IC: Ink coverage CMYK; Charact.: Characterization file; AM: Amplitude-modulated screen; NP/FM: Non-periodic screen/Frequency-modulated screen; ISO: International Organization for Standardization; ECI: European Color Initiative; PSO: Prozessstandard Offset

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