

# DTP: Creative Cloud

## some basic notions



### Fundamentals

- 01 Colour match
- 02 Bleed
- 03 Margins
- 04 Cover for a perfect binding
- 05 Black and colour separations
- 06 PDF generation

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More information on [repro.epfl.ch](http://repro.epfl.ch)

## Concordance of colours

### Synchronisation with the Europe PrePress 3 setting

In order for colours to maintain their CMYK value from one application to another (typically the import into InDesign of Photoshop images or Illustrator vector plots), it is imperative that all applications use the same colour settings.

In addition, this setting corresponds to that used in European printing companies, allowing a good concordance\* between the colours on your workstation and the printed result.

\* For a perfect concordance, you would also need to acquire a professional screen and calibrate it regularly.

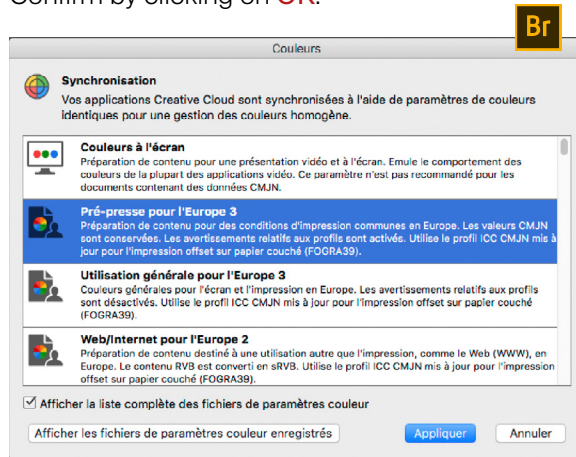
### Two ways to synchronize your Creative Cloud, with or without Adobe Bridge

In Adobe Bridge, go to the menu

**Edit > Colour settings...**

Choose **Europe PrePress 3**.

Confirm by clicking on **OK**.



All applications in your Creative Cloud are synchronized simultaneously.

Now all your new files will be based on these settings.

### Adjusting your previous files

When you open a file created with different colour settings than those of your work environment, two "Profile Mismatch" dialogue boxes open successively, for the RGB and then the CMYK.

Choose **Adjust the document to match current settings** to your work environment with the following settings.

- RGB: **Adobe RGB (1998)**
- CMYK: **Coated FOGRA39**

Finally, to ensure that the new profile is taken into account, we recommend that you "Save as..." to overwrite your old file, rather than just save it.

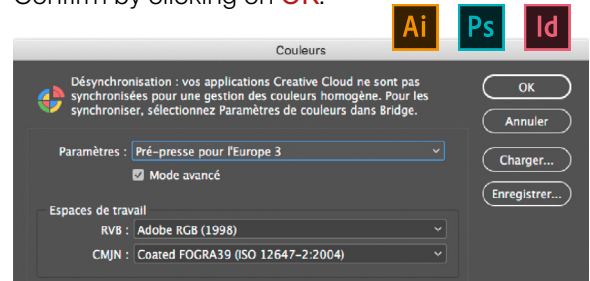
This remark specifically concerns Illustrator where the problem is well known.

In each application, go to the menu

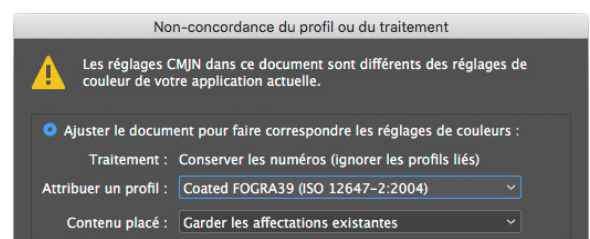
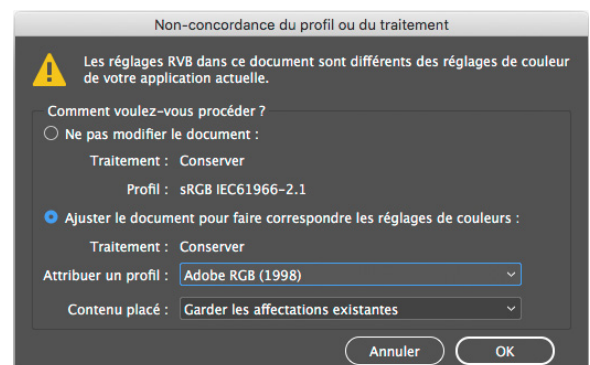
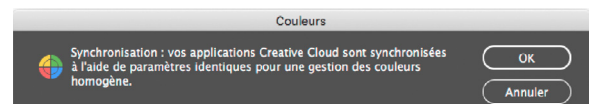
**Edit > Colours...**

Choose **Europe PrePress 3**.

Confirm by clicking on **OK**.



Once the last application has been configured, the dialogue box informs you that your Creative Cloud is now synchronized.



## Bleeds

All printers have printing margins, a non-printable area, of approximately 5 mm on each sides.

Thus, to produce a “full-bleed” document, i.e. one or more objects (background, image, text) positioned less than 6 mm from the edge, it is necessary to print on a larger paper format and then cut the excess to obtain the desired format.

For example, a full-bleed A4 document will be printed on a SRA4 paper format and then trimmed into a finished A4 format.

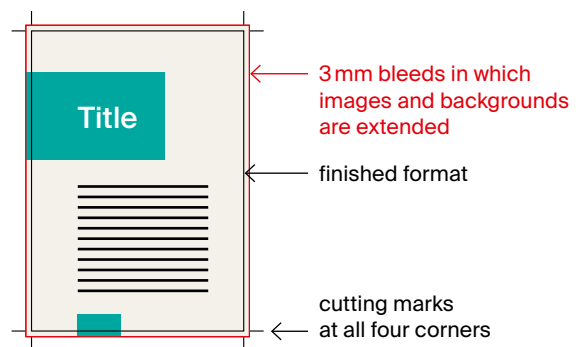
The printing tolerance of digital printers is 1 mm, so for duplex printing, the bias to be compensated can be as much as 2 mm.

For this reason, bleeds of 3 mm should be added on four sides, providing flexibility for shaping and avoiding the appearance of a white border after cutting. Your images and backgrounds will therefore have to “extend” 3 mm outside the finished format.

**Cutting marks** indicate the finished format of the document. They can be generated in the “Export in PDF” window.



The layout on the left will require a bleed, unlike the one on the right, which has comfortable margins on all four sides.



the cutting marks at all four corners indicate the finished format

in the Creative Cloud the declared bleeds are delimited by a red line

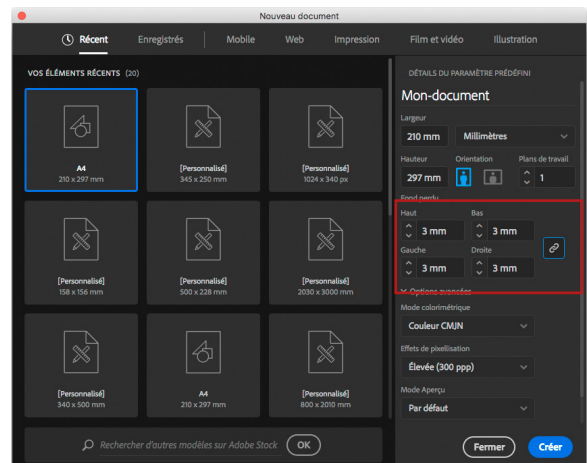
the coloured background has been extended by 3 mm to fill the bleed area

### Define the document bleeds

In Illustrator and InDesign, when creating a new document, you have the possibility to declare your bleeds, at the same time you define the format of your document.

N.B.: on older versions of the Creative, bleed settings are not directly visible, click on “More options” to display them.

Of course, these parameters can be declared or modified later; you can access them via the menu **File > Document format...**



## Margins

For a document to be pleasant to read, remember to leave comfortable margins; the result will be visually airy and resolutely more welcoming for the reader. Whites provide structure; do not try to fill every space left vacant.

### Margins that are proportionate to the size of the object

If for business cards, we can settle for a 4 mm margin, it will be far from enough for a poster. The margins must be adapted to the format of the object. Thus, for an A0 poster, avoid going down to less than 6 cm of margin, at the risk of giving the impression that the content is cramped.

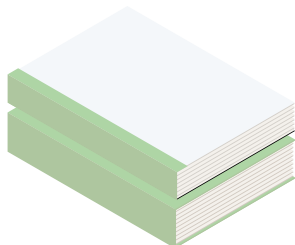
### Safety margins dependent on binding

For bound documents, it is imperative to know the type of binding before starting its layout, because margins are largely dependent on this criteria.



**Metal wire binding** – suitable for all types of documents, from a few pages to 240 pages (several ring sizes and colours).

When designing your document, you must take into account the drilling of holes. They are about 8 mm from the edge of the sheet, so do not position anything within 12 mm of the binding, and prefer a central margin (i.e. binding side) of 20 mm.



**Glued binding (thermo- and perfect)** – very common, as it is suitable for all types of documents from about twenty pages to several hundred.

This binding requires a comfortable central margin, as the document does not open completely at the risk of breaking the back. We recommend a minimum of 30 mm at the central margin to allow a pleasant reading of the document, without having to force the pages.

For perfect binding, the cover requires special attention, as it must be mounted specifically with the back included (see next page).



**Saddle-stitch binding** – suitable for small documents up to 40 pages (multiple of four).

Since the brochure opens completely flat, there is no loss of visibility between the two pages. Thus, no minimum margin is required at the centre.

This binding allows you to position images straddling the two pages, because there is no loss of readability due to the binding. However, it will be necessary to take into account the tolerances of digital printing and binding, and accept that the fitting may have a slight offset.

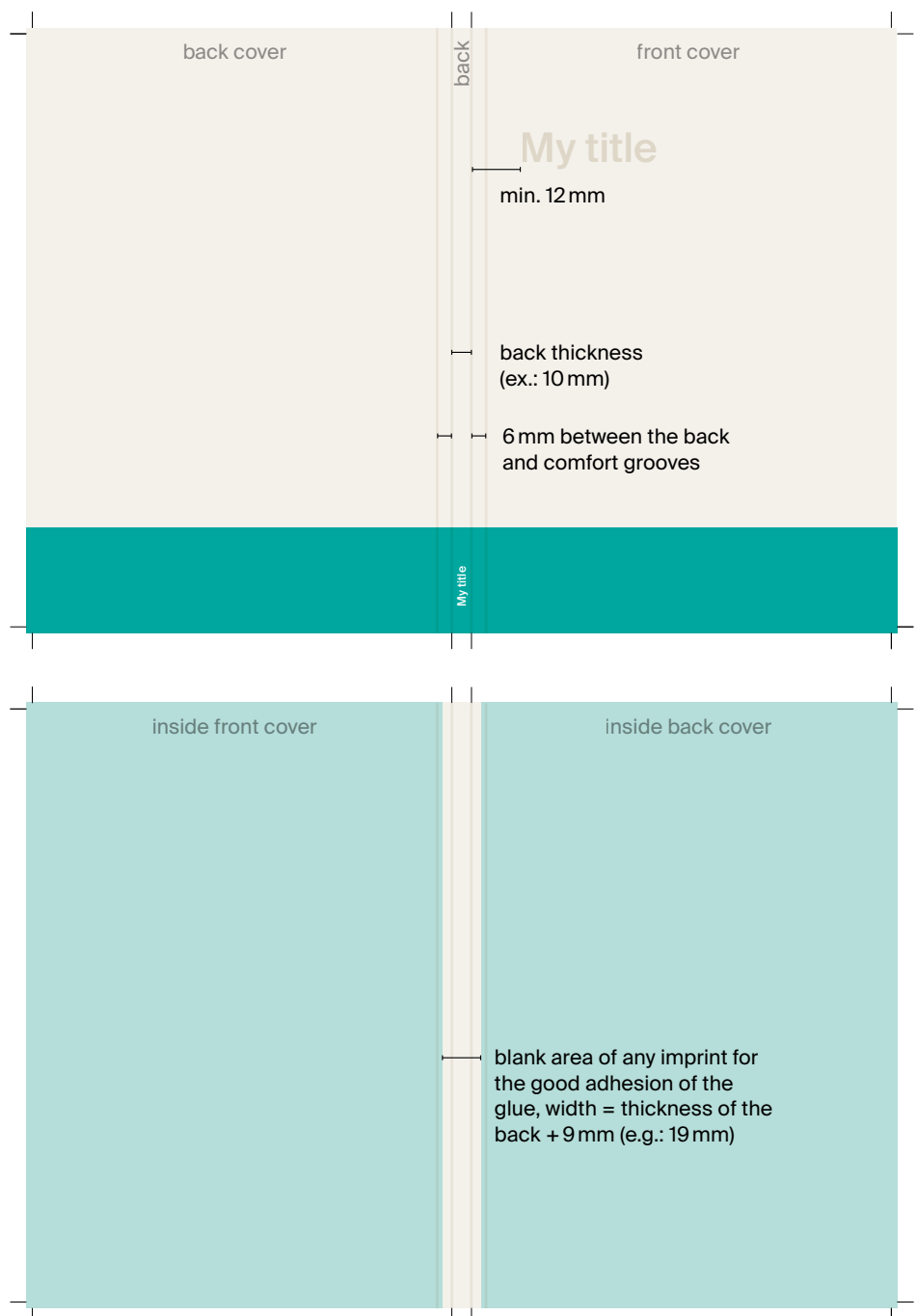
## Cover for a perfect binding

The perfect binding requires a specific cover layout, as the four pages that make up the cover must be laid out to include the back. The thickness of the back is calculated on the basis of the paper choice and the number of inner pages (ask us once these two parameters are known).

For backs larger than 5 mm, it is possible to write the title of the document on it. Make sure to leave at least 1.5 mm of lateral margins (between the text and the edge of the back). Thus, for a 5 mm back, it is possible to write a title with a capital height of 2 mm.

With the perfect binding, in addition to the two grooves marking the back, you can see two grooves located 6 mm on each side of the back: these are the comfort grooves, used to open the document without pulling on the binding.

On the front cover, we recommend you to consider the comfort grooves in your layout, by not placing any text within 12 mm of the back.



On the back, the glue will extend beyond the back to partially fill the space between the comfort grooves. As the glue adheres poorly to the toner, it is imperative to leave the area on the back blank (width of the back + 9 mm).

## Black and colour separation

Imperative when printing in offset, the control of its Colour Swatches remains important for a work intended for digital printing, especially in the case of a mixed document (colour document, with part of the pages in greyscale).

### Mixed colour–greyscale document

For a consistent report, it is common that only a portion of the pages are in color. If your file is correctly made and exported, the colour printer will automatically detect the greyscale pages and count them as such.

Since the price of a greyscale print is four to six times cheaper than a colour side, it is important that no errors are made in your greyscale pages, distorting their accounting.

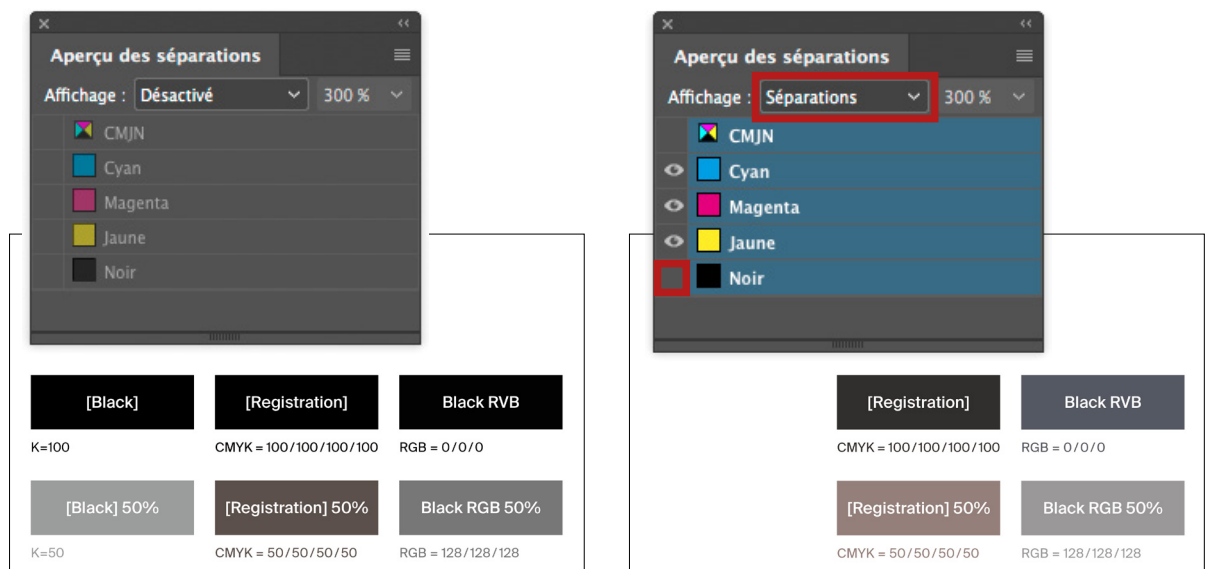
### Separations preview

To perform this check, in InDesign open **Window > Output > Separations Preview** or in Illustrator **Window > Separations Preview**.

Choosing **View: Separations**, you can then analyze your document layer by layer by disabling them individually.

We will make sure that the visually greyscale pages use only black ink and not all colours.

By deactivating the Black layer, and browsing through the pages, you can immediately see if an object persists on one of your grey level pages, while the preview should present a blank page. Below, the left column shows the “normal” view with all layers, and on the right the result in separation mode, with the Black layer disabled.



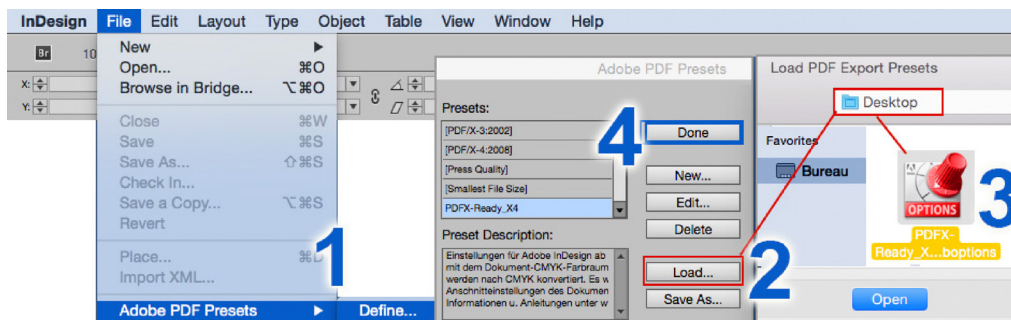
The first common error in InDesign would be to inadvertently use the **[Registration]** tone instead of **[Black]**. This particular colour is actually made up of the four inks at 100% (CMJN 100/100/100/100) and is only used to declare marks for offset production.

The other source of error would be the import of images that appear to be in grayscale, but are declared in RGB. You will then have to open each image in Photoshop, assign it the **Dot Gain 15%** grayscale profile in the menu **Edit > Convert to profile**, save the result as TIF and substitute it in your document.

## PDF generation

### Preliminary: Install the PDF export preset

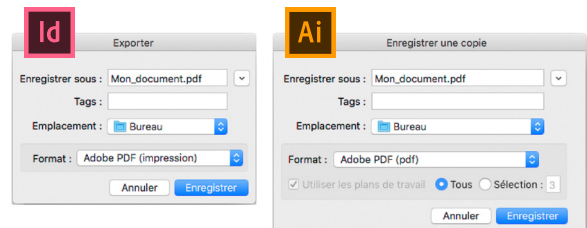
- A. Download the [Settings-CC\\_Digital](#) folder.  
Unzip the file (PDFX-ready\_X4-Digital.joboptions) on your desktop.
- B. From InDesign, load the preset **File > Adobe PDF Presets > Define...**  
In the "Adobe PDF Presets" window, click on **Load...**  
Select the **PDFX-ready\_X4-Digital.joboptions** preset you just downloaded.  
To validate this additional preset, click on **Done**.



### Generate your PDF

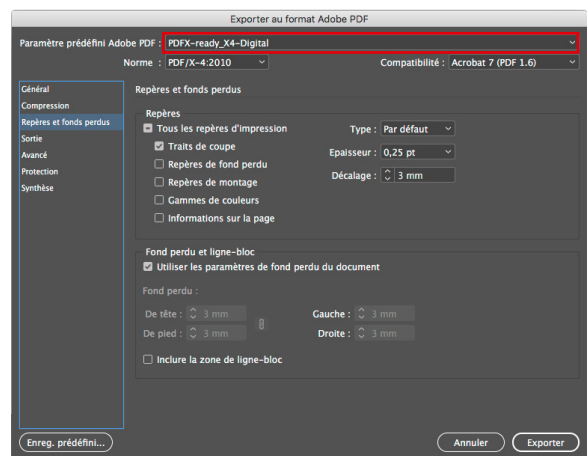
1. Save your work, then:
  - from InDesign, **File > Export > Adobe PDF (print)**
  - from Illustrator, **File > Save As... > AdobePDF**

Name your document, choose its destination, and then click on **Save**.



The "Adobe PDF" window opens.

2. Select the Adobe PDF Preset **PDFX-ready\_X4-Digital**.
  - if you have specified bleeds in your document format (here: 3 mm), they will automatically be included in the export.
  - crops marks will also be added.
3. Start generating your PDF by clicking on the **Export** button; process is done in the background.
4. Retrieve your PDF at the chosen location.



### Check colour separations

In Acrobat Pro, open the "Output Preview" menu and check that the grayscale objects (mainly text) are only "in the Black" (CMY = 0). Also make sure that you do not have any shades declared in direct tones (Pantone) in addition to the sfour-colour process.