

Everything You Ever Wanted to Know About Book Production: International Printing Specifications for Print-Ready Files

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Road Map

Document/Layout

- Number of Pages
- Bleeding & Margin
- Impact of Binding Type

Pictures/Graphics

- Resolution
- Lossless Data
Compression

Color Management

- Color Mode
 - CMYK versus RGB
- Color Profile

Files

- File Format
- Test Files
- Data Transfer

Document/Layout: Number of Inner Pages

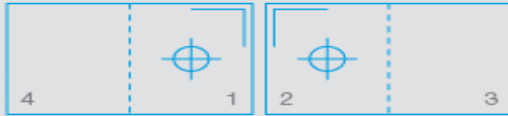
Check your number of inner pages by using the
4-Split-Rule

Sample Paginations from Past Tenders	4 Split Rule	Correct Pagination	Extra Pages	Alternative Paginations
86	$/4 = 21.5$	88	2 pages	84 or 88 pages
93	$/4 = 23.25$	96	3 pages	168 or 176 pages
190	$/4 = 47.5$	192	2 pages	184 or 192 pages

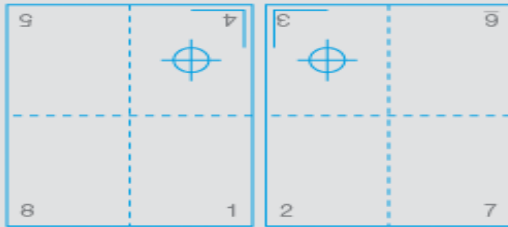
The **4-Split Rule** is based on printing signatures. A signature is a group of pages that are printed on both sides of a sheet of paper. The number of pages on a signature depends on page size and size of press sheet.

Defining a printing signature and the reason for the 4-Split Rule

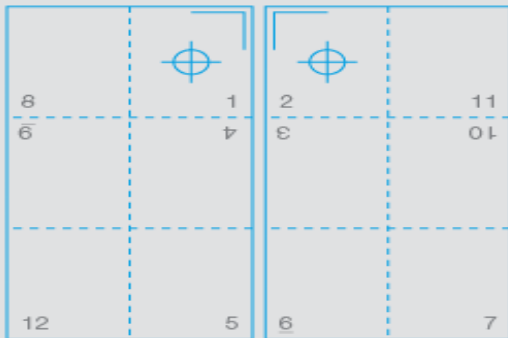
4-page Imposition



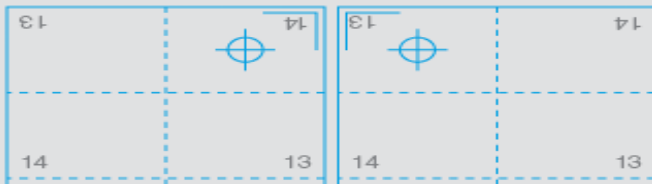
8-page Imposition



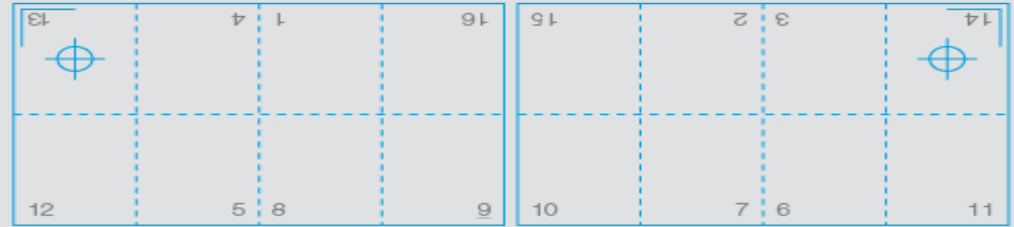
12-page Imposition



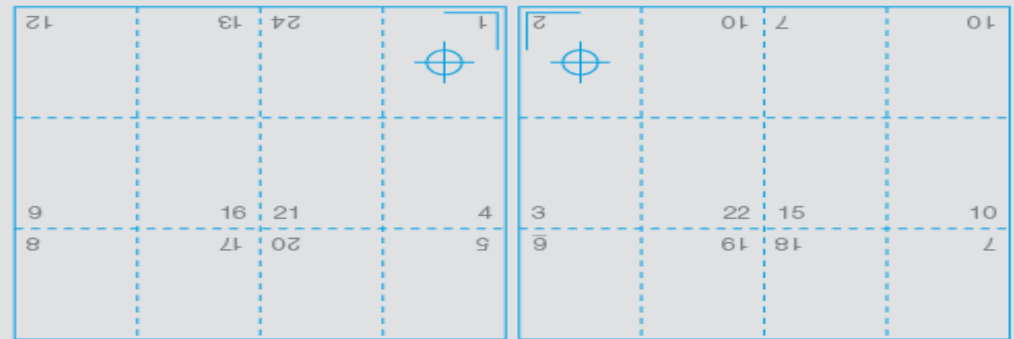
16-page Oblong Imposition



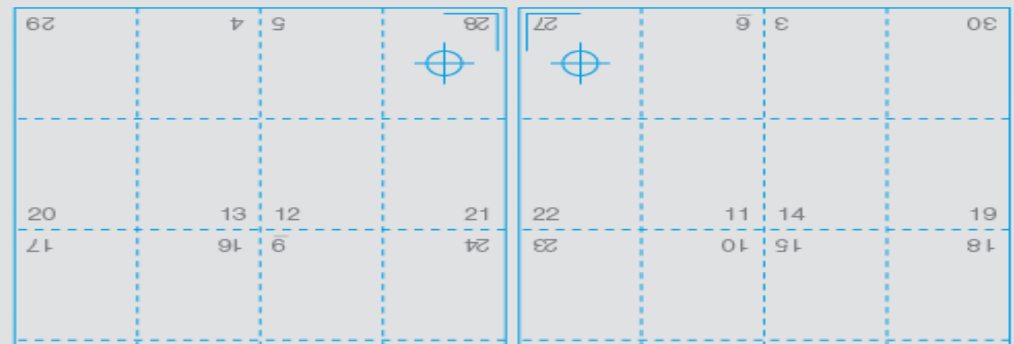
16-page Upright Imposition



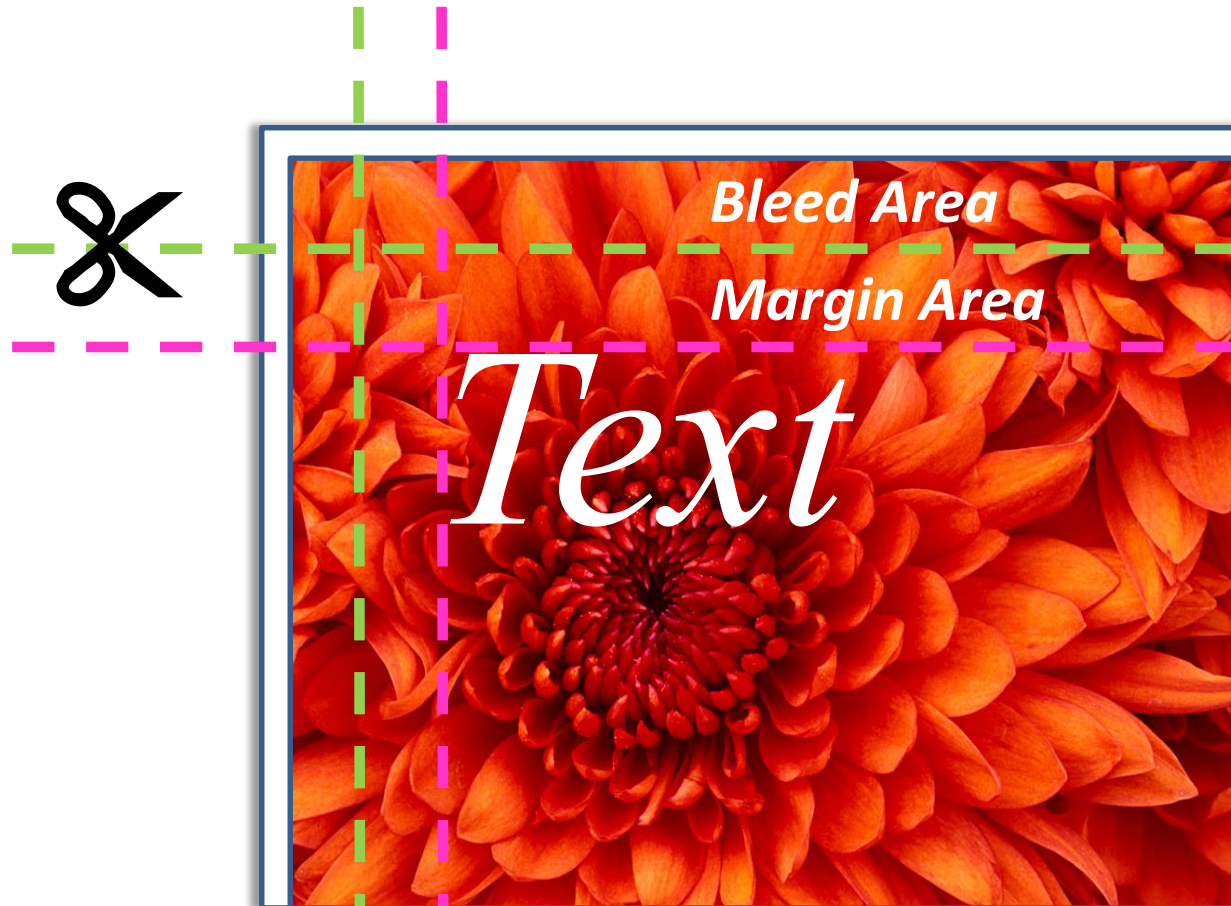
24-page Imposition



32-page Imposition



Document/Layout: Bleeding and Margin Area



Document/Layout: Impact of binding type on cover format

Saddle Stitching



Perfect Binding & Thread Sewn



Document/Layout: Impact of binding type on cover format

How to calculate the spine height beforehand?

$$\frac{\text{Paper Weight} \times \text{Paper Bulk} \times \text{No. of Inner Pages}}{\text{2000}} = \text{Millimeter}$$

$$\frac{80 \text{ gsm} \times 1.2 \times 144 \text{ Inner Pages}}{\text{2000}} = 6.9 \text{ millimeter} \rightarrow \mathbf{7 \text{ millimeter}}$$

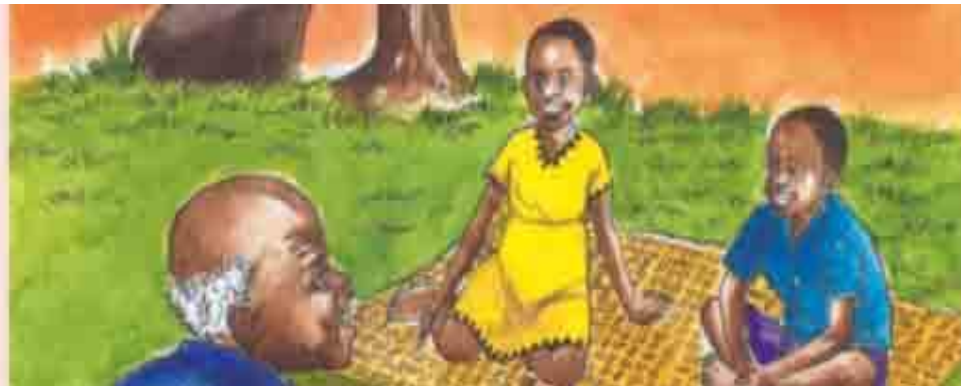
Pictures/Graphics: Resolution

Increasing quality with sufficient picture resolution

**300 dpi
high
resolution**



**72 dpi
screen
resolution**



Pictures/Graphics: Data Compression



Lossless

Using JPEG compression:
Less data size but “Artifacts”

Pictures/Graphics: Data Compression

Export Adobe PDF

Adobe PDF Preset: YURT Setting
Standard: None Compatibility: Acrobat 5 (PDF 1.4)

General
Compression
Marks and Bleeds
Output
Advanced
Security
Summary

Compression

Colour Images

Bicubic Downsampling to 300 pixels per inch
for images above: 450 pixels per inch

Compression: **None** Tile Size: 128
Image Quality:

Greyscale Images

Bicubic Downsampling to 300 pixels per inch
for images above: 450 pixels per inch

Compression: **None** Tile Size: 128
Image Quality:

Monochrome Images

Bicubic Downsampling to 1200 pixels per inch
for images above: 1800 pixels per inch

Compression: CCITT Group 4

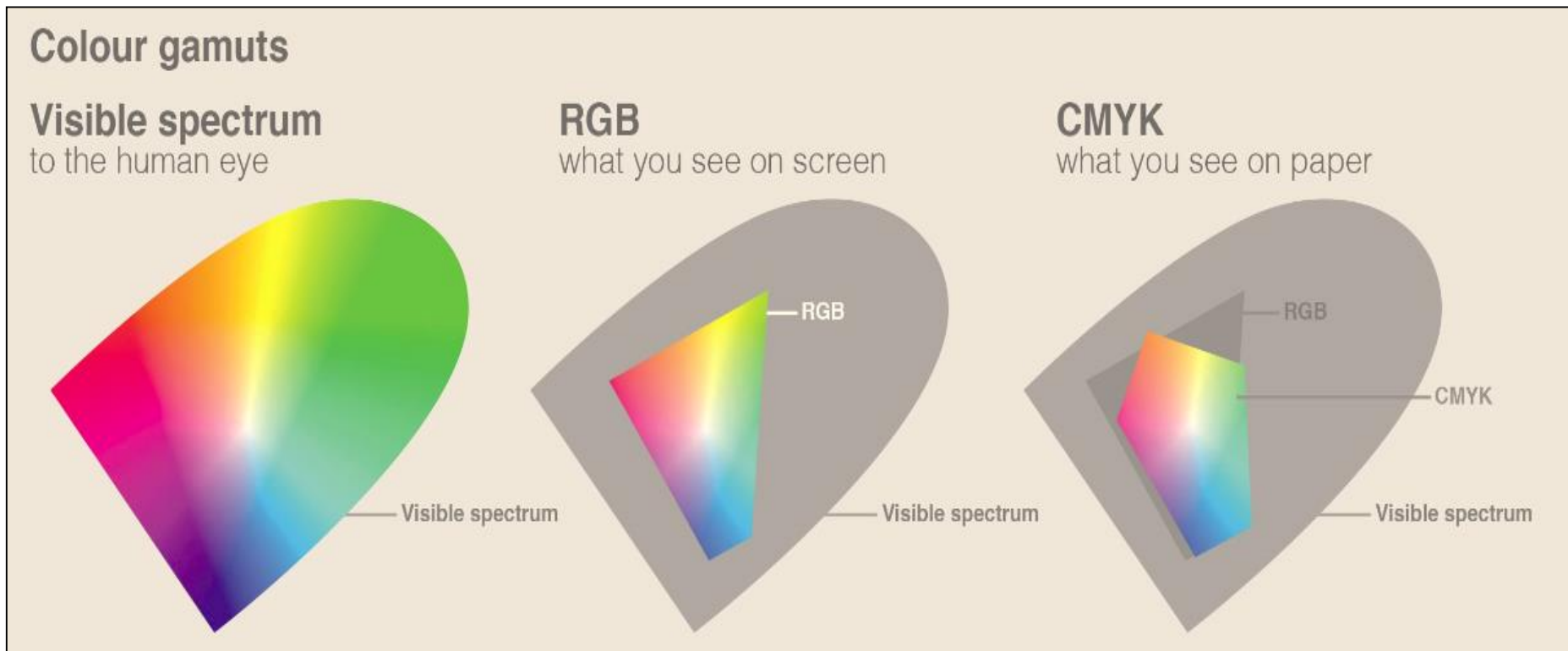
Compress Text and Line Art Crop Image Data to Frames

Save Preset... Cancel Export

**Correct PDF
Export
Settings**

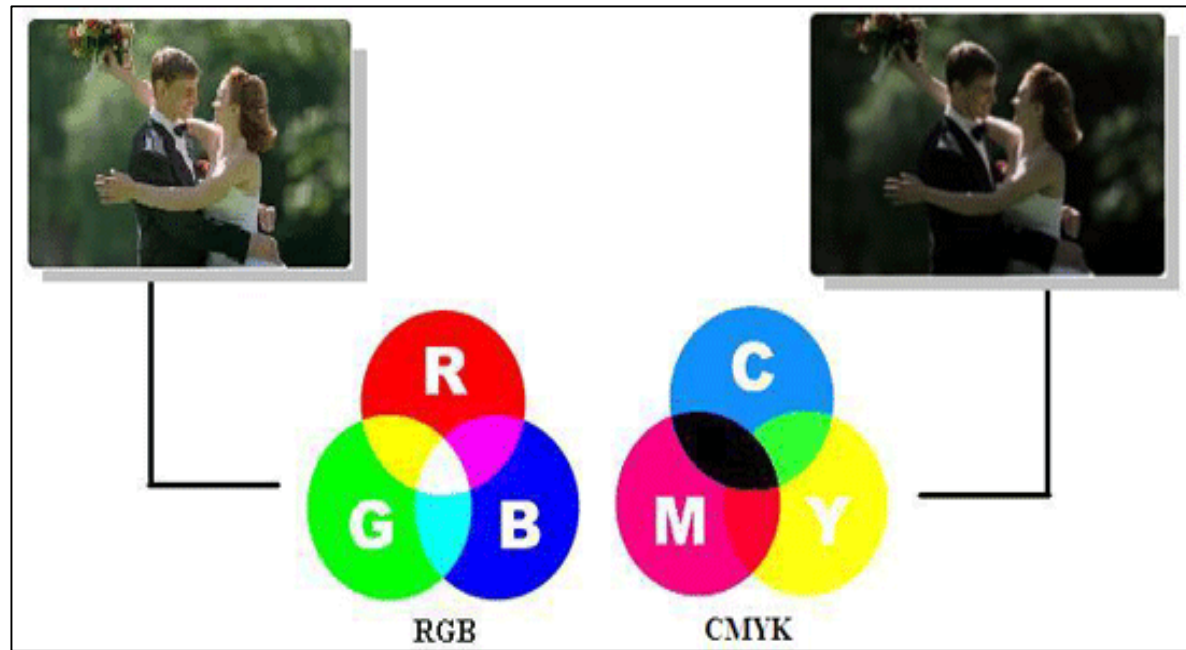
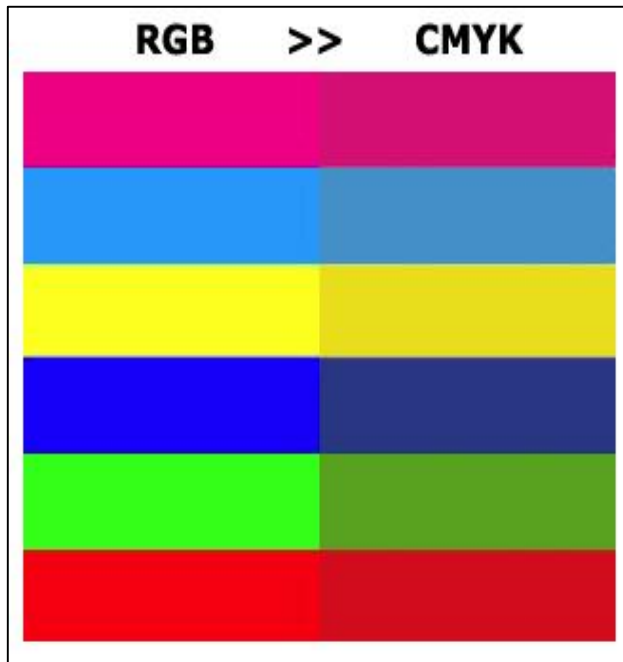
Color Management: Color Mode

CMYK versus RGB



Color Management: Color Mode

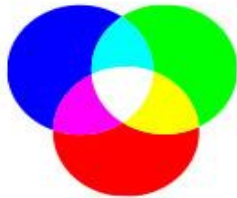
CMYK versus RGB



Color Management: Color Mode

CMYK versus RGB

RGB



Digital, Web

CMYK



Print

Spot



PMS 5483



Offset Print

Color Management: Color Profile

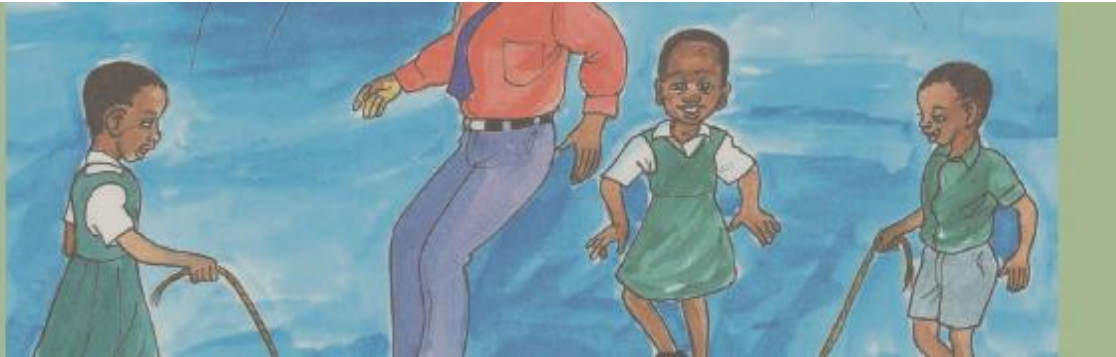
Using Color Profiles: International Standards

ICC website: www.color.org/index.xalter

For example:
ISO Coated,
ISO Uncoated, or
GraCol depending
on paper and the
printer



Any profile
without defined
international
standards



Files: File Format, Test Files, Data Transfer, Communication

Always Use Closed File Formats
Most Recommended: PDF



Use Test Files

Sending test files to your awarded printer beforehand can save a lot of time.

Data Transfer

Easy data transfer through cloud-based file hosting systems (*free of charge*).

Communication

Clear communication between all involved people to avoid any mistakes.



Extra! Exclusive Free Preflight Setting

Preflight is the process of confirming that the digital files required for the printing process are all present, valid, correctly formatted, and of the desired type.

Available for free:

- Includes settings to cross-check most critical issues
- Page size/format
- Pictures – resolution
- Color mode
- And more!

