
Colour Guide



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1. Colour Management

Colour space can be either RGB or CMYK. It is advisable to keep the original colour space as long as possible for to avoid unnecessary loss of colour shades. The colours are converted through ICC-profiles to an optimal CMYK profile during the ripping process.

For the optimal colour reproduction, the documents must be made by using following ICC-profiles:

- CMYK: CoatedFOGRA27.icc (do not tag or embed the profile)
- RGB: sRGB Color Space Profile.icm (do not tag or embed the profile)

Hint! The required ICC-profiles must be uploaded in the C:\Windows\System32\spool\drivers\color on a PC or in Library > Colorsync > Profiles on Mac OSX 10.5.

Hint! The required ICC-profiles can be downloaded from the Internet pages of International Colour Consortium: <http://www.color.org/registry/index.xalter>

Rendering Intent is Relative Colourimetric.

If you are unsure of the colour management settings, contact Strålfors for help.

Recommendations

Recommendation	Category	Information
Use the same colour values in every element that should have the same colour	layout objects	Even a slight difference in colour values can be very visible in printout
Use only pure black or pure shades of grey	texts & graphics	Use only K values in CMYK colour space or use even amount of RGB colours for to create pure black/grey. Do not use rich black.

Restrictions

Restriction	Category	Information
Do not tag or embed ICC profile	document	Create the document with colour management but without embedding or tagging the profile in the file.
Don't convert colours from one CMYK profile to another CMYK profile	document/ image	Wrongly made CMYK to CMYK profile conversion can cause pure black to turn to rich black.
Spot colours	layout/graphics	Strålfors doesn't support spot colours and they are converted to CMYK in the printing process

2. Fonts

Strålfors has a wide set of fonts that may be used in the documents. However, if any special typeface is needed, it must be purchased by Strålfors under the terms of the font license. The costs of the special fonts are charged from the customer.

Restrictions & recommendations

Instruction	Description
Embed all fonts	All fonts must be embedded in resource files or print ready documents.
Prefer OpenType or TrueType fonts	These type of fonts works best in all the different channels.
Avoid Type1 or Type3 fonts Avoid composite or CID fonts	May causer ripping problems.
Avoid using system fonts	System fonts are related to a specific operating system and are designed for the computer screen. They may not yield good results on printing.
Do not use artificial types	Different ripping processes handles artificial typefaces different ways and the result is unpredictable.

3. File formats of external layout resources – Object level

Recommended file formats are PDF, EPS, TIF, JPG and PNG. File format must be chosen regarding the type of the resource. Each format has own pros and cons. The resources should be submitted in the size in which they are to be used in layout (width & height 1:1).

Pure pixel images

TIF, JPG and PNG are the recommended pixel graphic formats. The size of the pixel image is recommended to be less than 20% of the page size.



Image: Pixel graphics are typically photorealistic.

TIF is a good choice for quality point of view since it is lossless image format. However, the file size may grow too heavy if file consists of many or very big TIF images.

TIF	Description
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Compression method	LZW or ZIP compression
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JPG is a typical file format of cameras and other image sources. It enables noticeable lighter files compared to TIF but the jpg compression method is lossy. In most of the cases JPG is a good format when it is done right:

JPG	Description
Compression method	Use only jpg-compression. JPEG2000 or JBIG2 compressions are not allowed.
Compression Quality	From 12 (Maximum) to 8 (High) Heavier compression may cause unwanted and visible artefacts which lowers image quality.
Saving JPG	Edit always the original image and save JPG only once, because more image information is permanently lost every time you save the image as JPG.

PNG is also a lossless image format. It generates slightly lighter files than TIF but processing time can be higher.

Pure vector graphics

Use **EPS** file format for vector graphics. Basic and simple vector image file (like company logo) is quite light and is recommended to deliver as vector EPS. However, vector images can be very complicated as well. If processing of the vector image is slow and the file is heavy (the image consists of thousands of curves and anchor points), it is better to convert it to pixel graphic.



Image: Logo types and other simple vector graphics are advisable to save as EPS and keep the vector format.



Image: Complicated vector graphics are advisable to turn to pixel graphic like TIF or JPG.

EPS	Description
Fonts	Convert all the text in the EPS graphic to paths.

Transparencies & drop shadows	If transparencies or drop shadows are used in the image, make sure the transparency flattener uses High Quality settings since they have resolution.
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Pure texts

Pure texts are recommended to be submitted as raw text saved in ‘.txt, *.doc, *.docx, *.rtf –format. Strålfors places the text in the layout and does the needed formatting.

Combined pixel & vector graphics and texts

It is recommended to use **PDF** format if the resource consists of pixel images, vector images and text or of any combination of those. Banners and advertisements are good examples of images which are best to do in PDF format.

Strålfors may need to reject PDF’s that are not in accordance with these PDF instructions and if PDF’s are not tested to work in our production.



Image: Banners are best to deliver as PDF.

PDF	Description
File format	<p>PDF 1.3 (Acrobat 4)</p> <p>It is recommended to use a known and tested software, such as Adobe Distiller, for generating the PDF. PDF which is generated by less common software must be tested in Strålfors before using it in production.</p> <p>Do not use “Save As PDF -command” in any software (mostly seen in Microsoft Office software’s) for to generate PDFs since it doesn’t allow changing PDF settings.</p> <p>Do not merge many PDF files to one PDF since it may mix up the PDF resource information like font or image information.</p>
File size	File size should be less than 1MB per one A4 page
Fonts	Embed all fonts in PDF
Transparencies	Transparencies in PDF are not allowed and they must be flattened in print files. Create the PDF as PDF 1.3 format (Acrobat 4) to flatten all transparencies.

Non- printable elements	PDF may not contain any non-printable objects like videos
Security settings	PDF may not be restricted by any security settings like password
Annotations	Annotations are not to be printed and should not be used in production files.
Forms	Prefilled forms are not to be printed and should not be used in production files.
Image rotations	Avoid using image rotations in the PDF layout always when possible.

4. Additional instructions for layout elements

Attribute	Category	Description
Resolution	Pixel images Bitmaps (line art)	150 - 300 ppi 600 ppi
Stroke weight	Vector lines	minimum 0.25 pt, one 100% tone of CMYK primary minimum 0,5 pt, rasterized or mixed colours minimum 1 pt, negative line Do not select Hairline setting since it is thinner line than the recommendation and its appearance is device dependent.
Font size	Texts	minimum 4 pt, one 100% tone of CMYK primary minimum 8 pt, rasterized or mixed colours, avoid hairlines in font minimum 11 pt, negative text, avoid thin lines in fonts: typically antikva/serfit type fonts
Gradients	Graphics	It is recommended to keep gradients shorter than 15cm for to avoid tone steps in a printout. Gradients should be carefully tested since different colour selections appear differently in printouts.
Colour Area Coverage	Page	Colour area coverage on a page should be less than 20%.
Objects close to paper edges	Layout	Do not position any crucial layout objects like important texts or logos closer than 5 mm from the page edges. Cutting the pages is not quite exact.
Variable text on the top of an image	Layout	Avoid placing variable text on the top of an image.
Transparent objects on the top of another object	Layout	Avoid placing transparencies (like drop shadows) on the top of another object when possible.