

## Technical standards

Updated: 20.05.2024

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## 1 The method of delivering digital materials

- 1.1 Digital materials should be delivered in PC format, uploaded to the InSite portal or sent to an ftp server. The login and password are provided by the Title Manager from the Client Service Office.
- 1.2 Other methods of sending files (e-mail, WeTransfer, etc. ...) are only possible after consultation with the Client Service Office.
- 1.3 All versions / mutations, corrections must be clearly marked.
- 1.4 Acceptance of soft proofs for printing takes place via the InSite Prepress Portal or PDF files. Persons responsible on the client's side for accepting pdf files should open them in Adobe Acrobat Professional with the Overprint preview option enabled.
- 1.5 The date of delivery of materials is considered the time of delivery of complete materials that do not require correction.

## 2 Generating files

- 2.1 Projects for printing should be prepared in the form of composite, multi-page PDF files or single pages in accordance with the guidelines of this document.
- 2.2 PDF files must be prepared in accordance with the standard for graphic works:
  - PDF 1.4 – 1.6,
  - PDF/X-1a:2001.
- 2.3 All pages of the project should have a properly defined format and orientation – in accordance with the technical parameters of a given project. In addition, they should be prepared on a 1: 1 scale and centred.
- 2.4 The work must contain properly defined TrimBox cutting fields and BleedBox bleeds. If crop marks are used, they must be set aside by 12 points. All page descriptions, e.g. separations, control measurement fields, should also be at a minimum distance of 5 mm from the net format.
- 2.5 It is not allowed to use elements saved in the Device N, Lab, RGB or other colour spaces. If other than CMYK colour spaces are used in the project, the files will be converted to CMYK space using an ICC profile appropriate to the substrate. Printing House Elanders Polska Sp. z o. o. is not responsible for any errors that occur during this process.
- 2.6 Spot / special colours must be defined by the actual colour name in the relevant standard.
- 2.7 The optimal resolution of continuous tonal is 300 dpi, the minimum acceptable resolution is 200 dpi.
- 2.8 The maximum TIL (Total Ink Limit) is:
  - Sheet printing 320
  - Web printing 300
- 2.9 To generate separation, the ICC profile adapted to the paper on which the printing takes place should be used.
  - COATED
  - UNCOATED
  - ICC profiles are sent to the Customer for his request.

## 3 File naming

- 3.1 The names of files for printing can only contain the following characters: a b c d e f g h i j k l m n o p q r s t u v w x y z 1 2 3 4 5 6 7 8 9 0 and \_ . The use of Polish characters in file names is not allowed.
- 3.2 Files delivered to the printing house should be named according to the following formulas:
  - XXXX\_i\_01\_CMYK\_a.pdf = publication block
  - XXXX\_c\_01\_CMYK\_a.pdf = cover

where: XXXX – title of the publication  
i – designation of a part of the project i = inlet (interior pages, book block, text block), use "\_c\_" cover (cover) for the cover  
01 - issue number  
CMYK – project colour scheme. In the case of Pantone or spot colours (e.g. UV varnish mask) use "\_SPOT\_"  
a – file version

3.3 Single pages for exchange / correction should be submitted as follows:

001\_XXXX\_i\_01\_CMYK\_a.pdf

where: 001 – page number in the publication  
XXXX - title of the publication  
i – designation of a part of the project i = inlet (interior pages, book block, text block), use "\_c\_" cover (cover) for the cover  
01 - issue number  
CMYK – project colour scheme. In the case of Pantone or spot colours (e.g. UV varnish mask) use "\_SPOT\_"  
a – file version, subsequent versions should be marked with b, c, ... etc.

3.4 In the case of file versioning / mutation, it is necessary to agree the nomenclature with the Client Service Office.

3.5 If files would be sent to INSITE filenames according with annex to this Norms are necessary.

## 4 Important graphic elements

- 4.1 Pages should contain at least 3 mm bleeds.
- 4.2 In the case of glued binding, the minimum distance from the spine of the text and important graphic elements should be 6 mm.
- 4.3 In the case of glued binding, it should be remembered that the 2nd and 3rd page of the cover and the 1st and last page of the insert will have 5 mm glued from the spine by side gluing.
- 4.4 The publisher should confirm with the printing house the width of the spine for perfect binding, taking into account any change in the paper and volume.
- 4.5 Frames around the page and text or illustration elements should not be placed within 5 mm from the trim line.
- 4.6 One line of text with a small font size should not be placed in the adjacent columns. Hyphenation of words in such texts is unacceptable.
- 4.7 Placing one picture on two facing pages should be avoided. It is unacceptable to project an illustration a few millimetres onto the adjacent page.
- 4.8 In order to obtain a greater depth of black in the areas of large solids, it should be generated from the so-called deep black. For coated papers, we recommend C 60 M 50 Y 50 K 100, for uncoated papers C 50 M 40 Y 40 K 100.
- 4.9 In the case of a small font size, below 8 points or other thin graphic elements, reversed print should be avoided (especially in the case of serif typefaces).
- 4.10 Thin lines, grids and other graphic elements should be prepared in one colour. This also applies to small and medium fonts.
- 4.11 Black texts smaller than 18 points on a coloured background should be overprinted. It is unacceptable to select the background from under such inscriptions.
- 4.12 In order to avoid possible inaccuracies of fitting, trapping, i.e. minimal overlapping of colours should be created.

- 4.13 In the case of a reversed print in several colours, the dominant colour should be selected for a given size of the reversed element. However, in the other colours, the selection should be greater.
- 4.14 In the case of covers with a flap, the Customer Service Department must agree with the customer - whether the covers are to be flush with the block or whether they can be narrower and by how many mm from the block, made in one or two machine settings.

## 5 Client reference materials

- 5.1 The colour proof must be made in accordance with the ICC profile for a given substrate.
- 5.2 The colour scheme of the substrate should correspond to the colour of the bulk copy paper.
- 5.3 There should be a UGRA / FOGRA MEDIA WEDGE V3 control strip on each proof page, which allows to check if the proof has been made correctly with the specification. A proof page without a control strip cannot be used as a reference material for printing.
- 5.4 The proof page should be made after the last correction from the materials sent to the printing house, otherwise it is not a reliable basis for printing.

## 6 Additional recommendations

- 6.1 When ordering additional operations such as inserting, sticking or pasting, the client is obliged to provide product samples with an exact mock-up or description to the Client Service Department specifying the method of placing in a given binding and the method of sticking.
- 6.2 The technical parameters of proof pages delivered from outside must be agreed with the Client Service Department (title manager).
- 6.3 Materials listed in item 6.1. should be delivered to the printing house along with a document containing the following information:
  - title and number of the magazine,
  - number of pallets,
  - number of packages on a pallet and copies in a package.
- 6.4 The above guidelines apply to standard projects with inserts. In the case of difficult, non-standard projects (e.g. an easily damaged insert, a complicated method of fastening), individual arrangements with the client are necessary. Inserts damaged in production will be returned to the publisher.
- 6.5 Each delivery should include a surplus for any damage during production. The amount of the surplus for possible damage depends on the type of technological process and the type of insert and should be agreed with the Client Service Department (title manager).
- 6.6 The date of insert delivery to the printing house should be agreed with the Client Service Department (title manager).
- 6.7 The shift of the insert in relation to the specified place on the page should not exceed the acceptable tolerance range.

Position	Acceptable	Unacceptable
Insert with outlined insertion area	shift <= 2 mm	shift > 2 mm
Insert with no outlined insertion area	shift <= 2 mm	shift > 2 mm

## 7 Non-standard production

- 7.1 Non-standard production means any product or service whose performance conditions are not specified in technical standards or, due to specific client needs, exceed the tolerances specified in this document (e.g. inserts, special covers, special packaging, etc.). Requirements for non-standard production should always be discussed and agreed separately between the client and the printing

house. The agreed standards should be based on the experience of the printing house and / or tests performed and should be clearly stated in the contract or other document signed by the client and the printing house prior to production.

## 8 Basic quality standards of production

- 8.1 The colour of the finished product should be consistent with the template provided by the publisher, taking into account the limitations resulting from the technical capabilities of the machines, the quality of the paper, materials provided by the publisher and other factors affecting the colour of print.
- 8.2 The following can be used as a template:
  - 8.2.1 Proof pages, analogue or digital, must meet the requirements set out in section 5 “Client reference materials”. If the individual parameters are not met, it is possible that full colour consistency between the proof and the bulk production copy may not be reproduced.
  - 8.2.2 The composition approved by the customer during printing constitutes the colour pattern for subsequent productions.
  - 8.2.3 Earlier edition (previous production) – when the colour template is to be the earlier edition (columns, advertisements, etc.), the printing house should be informed about it each time. The use of a previously printed material is associated with the possibility of obtaining a different colour scheme.
  - 8.2.4 If the client does not provide any colour references, standard values for individual colours K, C, M, Y according to ISO 12647-2 will be used, for a particular paper group.
- 8.3 Tolerance of the print parameters of absorbance and raster point increment.

	<b>Acceptable</b>	<b>Unacceptable</b>
Absorbance	$\leq \pm 0,1$	$\geq \pm 0,1$
Raster point increment	$\leq \pm 4\%$	$\geq \pm 4\%$

- 8.3.1 The correct colorimetric values for individual measurement fields should be in those places along the width of the sheet where they significantly determine the colour of a given graphic element. Incorrect values of individual, single measurement fields do not determine the colour correctness of the entire sheet.
- 8.3.2 During printing, deviations from the colour reference (approved by the client) or from the applied standard values should not exceed  $\Delta E_{ab} 5$ .
- 8.4 Colour registration
  - 8.4.1 The permissible deviation of colour registration is 2 lines for LWC papers (raster ruling 150 lpi), for SC papers it is 2.5 lines (raster ruling 133 lpi).
  - 8.4.2 Due to the automatic registration systems used on printing machines and the way they work, it is possible to temporarily exceed the tolerance of colour registration. It should then be assumed that the error concerns a maximum of 200 folded signatures.
- 8.5 Pantone spot colours. The correct colour is considered to be a colour that visually fits between the sample (-) and the sample (+) provided by the paint manufacturer for a given substrate (gloss / matt). Spot colours should be accepted by the client each time.
- 8.6 Fold and page layout
  - 8.6.1 The permissible deviation of the fold from the fold line is  $\pm 1$  mm.
  - 8.6.2 The permissible deviation of the arrangement of pages in the folder relative to each other is  $\pm 2$  mm and contributions between them is  $\pm 1$  mm

- 8.7 Gluing in line – on hard-to-absorb papers there is a possibility of the adhesive “spilling” beyond the gluing line. The permissible width of paper gluing beyond the gluing line is 4 mm.
- 8.8 Fitting of the drawing and the varnish layer – in the case of selective varnishing, the permissible deviation of the fit between the drawing and the varnish layer may be 1 mm.
- 8.9 Varnish layer – an incorrect varnish layer of offset, dispersion or UV varnish is considered to be a layer with uncoated spots on the surface to be varnished.

## 9 Bookbinding process

- 9.1 If sheets from different cold-set, heat-set and sheet printing technologies are combined in a binding, the linear dimension between the sheets may change (the effect of shortening the cover). This difference largely depends on the type of paper used and the current climatic conditions.
- 9.2 Cut dimension – the permissible deviation of the cut dimension is  $\pm 1$  mm in relation to the nominal dimension for the cut in the head and bottom of the copy and  $\pm 1.5$  mm for the front cut.
- 9.3 Cut parallelism – the permissible deviation of parallelism of the two binding edges measured after folding the inner element in half is 1 mm.
- 9.4 Positions of pages
  - 9.4.1 The permissible vertical deviation in the arrangement of pages between the folded signatures in the finished copy is 2 mm.
  - 9.4.2 sheet folding within the permissible deviations is  $\pm 1.5$  mm,
  - 9.4.3 deviations occurring during printing on a sheet and cutting it into single parts (covers) may amount to  $\pm 1$  mm,
  - 9.4.4 tolerance of feeding and sticking the cover is  $\pm 0.5$  mm.
  - 9.4.5 The strength of saddle-stitch binding – a binding, the folded signatures of which do not break apart as a result of normal opening of the copy, is considered correct. In stitched binding, the tear-out strength of the copy is not measured, because in this case the result obtained is not the binding strength, but the strength of the paper.
- 9.5 Saddle-stitched binding
  - 9.5.1 As standard, the copy is stapled with 2 staples. The staples should be placed in the spine and should not move to the front or back of the product. The allowable vertical and horizontal shift of the staples should be within the allowable tolerance range.

	Acceptable	Unacceptable
<b>up to 2 folded signatures</b>	Horizontal shift $\leq 1.5$ mm	Horizontal shift $> 1.5$ mm
<b>3- &gt; folded signatures</b>	Horizontal shift $\leq 2.5$ mm	Horizontal shift $> 2.5$ mm

- 9.6 Cutting sheets – the permissible deviations when cutting a sheet into single parts are 1 mm.
- 9.7 Folding and perforation / creasing outside the printing machine line
  - 9.7.1 Folding – the permissible deviation of the fold from the nominal line and its location is  $\pm 1$  mm on each fold.
  - 9.7.2 The permissible deviation of the perforation / creasing performed from its nominal location is  $\pm 1$  mm.
- 9.8 The final deviations of the prepared folds and perforation / creasing are influenced by the permissible deviations occurring during the previous technological processes, i.e. printing and cutting sheets.
- 9.8 The Customer is obliged inform a printing house about ordering a new works with a separate spine, in advance.



9.9 In case a separate spine ( high risk spine where is possibility having paper with different bulk – different paper than in specification ), the printing house reserves the right to postpone/extend the delivery date by the time needed to make the model.

## 10 Filing complaints

10.1 The Ordering Party has the right to file a complaint within 14 days from the date of shipment, only in the event of any quality deviations in the reproduced materials exceeding 1% of the volume of circulation.

## 11 DELIVERY ACCEPTANCE CRITERIA

11.1 The delivery is considered to be in accordance with the order if at least 99% of the product has quality parameters within the tolerance range allowed by this specification. Polish standard PN-ISO 2859-1: 2003 *Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection* is used when determining the compliance level of a product.

**A delivery of materials that do not meet the above specification limits the liability of the printing house Elanders Polska Sp. z o.o. for the final product. It may also result in a change in the date and / or cost of work completion.**

## Digital standard:

The digital printing process shall meet the requirements:

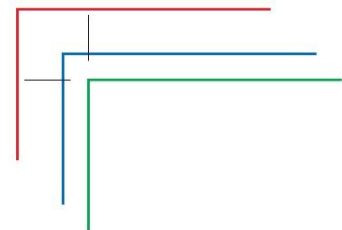
files should be prepared according ISO standard: PDF / X1a: 2001

## Document Structure

- A complete files including the cover and inlay
- The pages must be in sequential order
- Covers for binding stitching products should be placed as first and last in the file
- Cover with spine is defined as the spread (Plano), including the addition of spine width in the format
- Any digressions defined as the spread (Plano)

## Page Layout

- Pages should be centered on the surface
- Crop marks are visible on the surface
- Bleeds must be minimum 3mm
- The following PDF markings shall be correct:
- (Crop box, Bleed box, Trim box)



## Colour

- Press file should contain only the colors they intend to press
- Standard color definition of full color CMYK
- Pixel graphics should be adapted to CMYK with the correct ICC profile. Recommended profiles: ISO profiles for right paper type.
- Vektorgrafik should be defined in CMYK
- All spot colors should be properly defined
- Spot colors intended for four-color process will be separated to CMYK





**Moreover:**

- Recommended images resolution -300dpi (min.200dpi)
- TIL max 320%- for sheet printing
- TIL max 300%- for web printing

### **New file naming for INSITE at Elanders Poland.**

We have prepared new APA files and it is necessary to use the following file naming so that the files are automatically placed in the correct order in the prepared page lists.

Please name files uploaded to Insite according to the following new naming scheme.

**Name for inlet: „\_i\_”**

001-016\_i\_xxxx.pdf - if the inlet pages start from page 1

003-018\_i\_xxxx.pdf – if the inlet pages start from page 3

**001-016\_i\_xxxx.pdf** - The numbers indicate the range of pages that is in the file, it is important that they are placed at the beginning.

### **You can also prepare files as individual pages.**

**If the inlet start with pagination 1, then:**

001\_i\_xxxx.pdf

002\_i\_xxxx.pdf

003\_i\_xxxx.pdf etc

Or

01\_i\_xxxx.pdf

02\_i\_xxxx.pdf

03\_i\_xxxx.pdf etc

**If the inlet start with pagination 3, then:**

003\_i\_xxxx.pdf

004\_i\_xxxx.pdf etc

Or

03\_i\_xxxx.pdf

04\_i\_xxxx.pdf etc



### File correction

And this is how we do the correction.

That is, if we have uploaded pages in the range 001-016\_XXXX.pdf and we need to replace page 5, we should name the file 005\_i\_XXXX\_popr.pdf.

Please add "popr" to the correction files.

"XXXX" - Please do not use Polish characters in this field. We also suggest that you use short names.

### Name for the cover: „\_c\_”

**If the covers are prepared as spreads, we upload two files and name them:**

01\_c\_XXXX.pdf – Front cover (1 and 4 page of cover)

02\_c\_XXXX.pdf – Back cover (2 and 3 page of cover).

or

01-02\_c\_XXXX.pdf

**If the covers are prepared as single pages then:**

01\_c\_XXXX.pdf

02\_c\_XXXX.pdf

03\_c\_XXXX.pdf

04\_c\_XXXX.pdf

Or as one file:

01-04\_c\_XXXX.pdf

**In case of spot varnish:**

01\_l\_Lakier.pdf

**In case of inserts:**

01-04\_w\_XXXXX.pdf – as one file containing, for example, 4 pages

Or as spreads (similar to cover):

01\_w\_XXXX.pdf – Front of insert (1 and 4 page of insert)



02\_w\_xxxx.pdf – Back of insert (2 and 3 insert pages).

Or single pages:

01\_w\_xxxx.pdf

02\_w\_xxxx.pdf

03\_w\_xxxx.pdf

04\_w\_xxxx.pdf

**Additional comments:**

1. It is important to decide how to prepare the files.

- Do the measurements start from 1 page or from 3?

- Whether the cover is prepared as a spread or not. And whether it has additional pages, e.g. in the form of a spine.

2. Please give this information to the printers so that we can prepare the appropriate templates, which we will use to start the work in Insite.

3. There will be one APA for all customers.

4. Please note that files marked Rejected in Insite will be automatically removed from the system.