

Layout preparation for flexography

Technical requirements and recommendations

File formats

Please submit printing layouts in any of the following formats:

- *.ai** (Adobe Illustrator CC or an older version)
- *.pdf** (see the note about preparation)
- *.eps**
- *.tif** (only if the design does not contain text, symbols, logotypes and other elements that should normally be in the vector graphics)
- *.psd**

*PDF from Adobe Illustrator
Choose a preset (Illustrator default).

*PDF from CorelDraw: File -> Publish to PDF;
In the dialogue window "PDF style:" choose "PDF for Editing"; by clicking the button "Settings...", in the keyword "General", in the menu "Compatibility:" choose the latest possible PDF version. (for CorelDraw X3 it is Acrobat 6.0; for CorelDraw X5 it is Acrobat 9.0)

*PDF from other graphic programmes: Choose presets 'Press Quality', 'For Editing' or a similar preset that provides the maximum quality.

* Never use outdated PDF/A or PDF/X standards.

Please check if all support art is embedded in the artwork. Otherwise all linked images should be attached along with the artwork. In addition to this, please, submit a file for preview in *.jpg format, if the submitted printing file is not a PDF.

You can send files to the following e-mail: **dc@liepajaspapirs.lv** or by using file transfer services like failiem.lv or wetransfer.com.

Artwork preparation

Only CMYK or Grayscale colour model can be used in the artwork. In addition spot colours from the Pantone Matching System catalogue Solid Coated and Solid Uncoated (for uncoated substrates only) can be used. If the artwork is to be printed on a transparent film or on a gold/silver foil material, you have to indicate the white masking colour. It must be distinguished as a separate spot colour, and it must also be placed in a separate layer or at least nearby. In the same manner you have to separate silk screen printing, cold/hot foiling, relief printing, as well as the shape of the varnish, if not the whole sticker is varnished.

* The printing file and illustrations must not have the RGB colour model used under any circumstances.

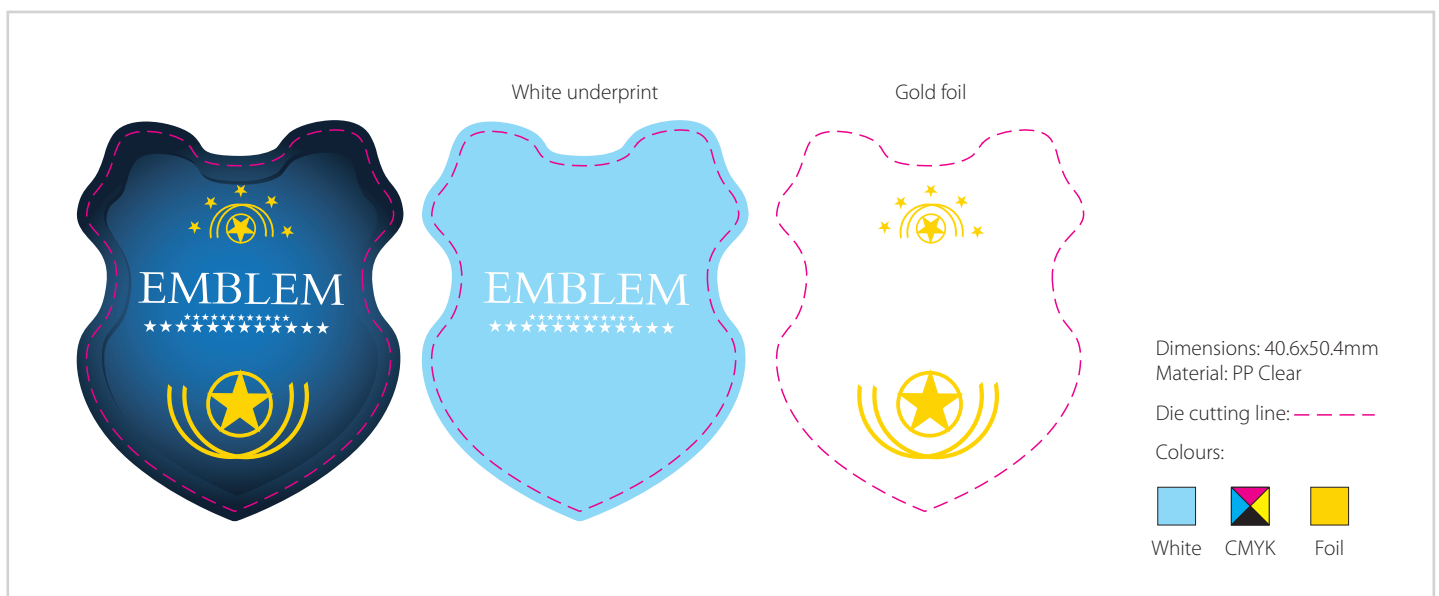
* The maximum number of printing sections that can be used is 9, including varnishing. However, if the work is done by rotation silk screen printing, then the maximum number of sections is 8, including the silk screen section itself. In post-process it is possible to perform silk screen printing in 2 more sections, and hot printing and/or relief printing in 2 other sections.

The die cutting line must be clearly indicated. Bleed area must be at least 1.5 mm. Bleed is not necessary for shrink sleeves, but it is recommended to indicate the outline as well as folding lines and welding seam area.

Next to this you must provide information about the colours used in the artwork, dimensions of the sticker as well as other significant information that we should take into account when preparing the layout for printing.

* Digital printing is possible with white and CMYK wide gamut printing, covering around 95% of Pantone Solid Coated catalogue (except metallic and fluorescent colors). In addition it's possible to add 1 flexo section.

* Example



Illustrations and raster graphics

Raster illustrations must be in at least 300dpi resolution. Colour models that can be used – CMYK, Grayscale, Pantone C, Pantone U. Illustrations that have been used must be attached next to the printing file, so that it is possible to make the necessary corrections that are characteristic to flexography. They can be in the formats *.psd, *.tif, or *.eps.

Texts

All texts in the submitted file must be converted to outlines. But if any text editing is planned for the layout, an open file and all used fonts (*.ttf or *.otf that can be used in Windows) must also be submitted. The minimum size of the font is 4 pt for texts in a single colour and with a 100% fill. This is true for standart typefaces (Arial, Times New Roman). If using ultra thin typefaces, it is important to check that printing elements are at least 0.12 mm in width. Small sized texts cannot be rasterised under any circumstances.



Barcodes and QR codes

Barcodes should be printed in a single color with no raster. Sumbitter of the artwork holds the responsibility for correct design, size, placement and color scheme of the barcode, according to standarts.

Limitations characteristic to flexography

You should consider differences between flexography and offset printing when preparing designs. Use of elastic printing plates and printing on multi-layered materials sets restrictions for the colour registration and the minimum dot size. The maximum quality can be obtained if these characteristics are taken into account during the designing process. It is possible to make a 1% or 2% raster dot on the plate, but dot gain can be up to 10-12% on the printed material, depending on the elasticity of the used plate, properties of the printed material and several other factors. This effect can mostly be seen in gradient fills or drop shadows, when fill in the design ends at 0%, but it stops at a clearly visible 10-12% edge when printed.

GRADIENT IN THE DESIGN



Linear gradient, 100% - 0%



Radial gradient, 75% - 0%

THE PRINTED GRADIENT



Linear gradient, 100%-the smallest dot



Radial gradient, 75%-the smallest dot

If any uncertainties regarding the layout preparation for flexography occur during the designing process, you can always consult us with these questions. We are all eager to achieve the best possible result and if we work together, it is possible to do so!

* When exporting illustrations to PDF, they are sometimes cut into small pieces. This happens if the incorrect PDF settings are chosen. We cannot accept such files because we then cannot make the necessary corrections.

* For tiny and small texts (smaller than 12 pt) it is recommended to use only one 100% colour. Otherwise the printed text might be hard to read due to the colour shifting.

* In order for Pantone colours to match the catalogue, it is printed with a large colour lining. Therefore if the design requires using both 100% filled areas and raster, the raster should be separated on a separate imprinting form. Otherwise the colour won't match the one in catalogue (it will be lighter) or the raster will be clogged and uneven in some places. This is especially related to the metallic golden and silver colours (P-871-P877), which are recommended to be used only with a 100% fill.

* The minimum single colour line thickness in a 100% fill must not be lower than 0.12 mm. Multi-coloured lines or lines in the raster should not be thinner than 0.4 mm.