

## SPECIFICATION FOR PREPARING FILES FOR PRINTING

PREFERRED FORMAT: **PDF (scale 1:1)PDF/X-4 2010** v1.5 or higher.

**OTHER FORMATS ALLOWED:** AI, PSD, IND.

### FILE PREPARATION GUIDELINES:

1. The resolution of raster images must not be less than 300 dpi. Images should be embedded or added as links in a separate folder.
2. Required colour model: CMYK or greyscale. If secondary colours from the Pantone palette are used, make sure they are correctly described in the document (the sample of the secondary colour indicated using the number from the palette).
3. All fonts must be converted to curves and, in case the changes in the text are required, the printing house must be provided with font installation files and the design in editable form.
4. Any additional elements such as refinements should be on a separate layer:
  - **SPOT VARNISH** – printing vector images using Overprint (if there are varnished raster images, consultation with the printing house is necessary in order to confirm the possibility of such refinement).
  - **HOT STAMPING** – printing vector images using Overprint.  
Technical limitations:
    - maximum sheet size 1050x750mm;
    - minimum line width, which ensures the correct reproduction of the drawing is 0.2mm;
    - negative images - minimum width 0.35mm;
  - **EMBOSSING** – printing vector images indicated in the file using secondary colour, where 0% = no embossing and 100% = embossing. Any intermediate colour saturation values may result in incorrect embossing.
5. The layer containing the cutting-die grid must be defined with a secondary colour with the overprint attribute.
6. Black elements:
  - Text - 100% K using the OVERPRINT option,
  - Packaging background - preferred saturation: greyscale (K only) or 60/40/20/100 with the overprint option turned off.
7. Bleed:
  - solid board: 3 mm;
  - coated packaging:
    - CORRUGATED E, F: 4 mm;
    - CORRUGATED B, EB, EE: 7 mm;
8. Safety margin (distance of significant elements from grid edges)
  - solid board: 3 mm;
  - coated packaging:
    - CORRUGATED E, F: 4 mm;
    - CORRUGATED B, EB, EE: 7 mm.
9. Trapping - 0.1 mm in the centre and 0.05 mm on the outside (standard).



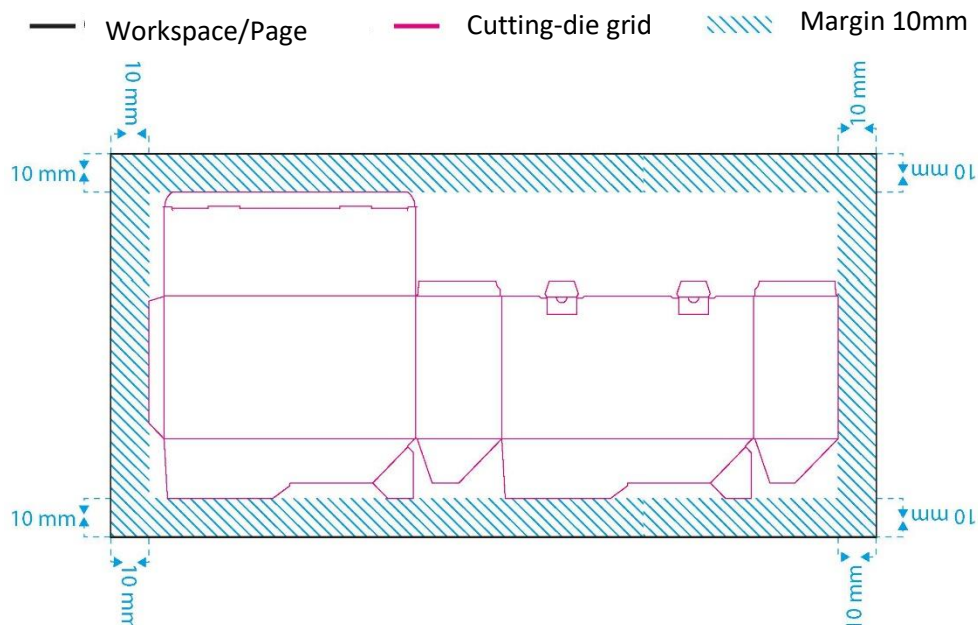
10. Minimum line thickness:
  - positive 0.1 mm;
  - negative 0.15 mm;
  - multicoloured 0.2 mm.
11. Minimum safe font height (capital letter B) - SANS typeface positive 1.3 mm (negative 1.5 mm), SERIF typeface positive 1.6 mm (negative 1.8 mm).
12. EAN barcode - BWR 50um, magnification 0.8-2 (depending on substrate). The printing house does not perform barcode verification as a standard (only on customer's request – additional fee according to individual arrangements/price list).

## TECHNICAL DATA:

1. Preferred colour profile of the work
  - coated substrate: Coated FOGRA39;
  - uncoated substrate: uncoated FOGRA47;
2. Minimum safe ink saturation (applies to one printing unit) - 5%.
3. Maximum ink saturation (TOTAL INK) - 300%.
4. Number of printing units:
  - B1 format: 6 (CMYK+2/0 or 6/0) with an option of printing on both sides;
  - B0 format: 5 (CMYK+1/0 or 5/0) with an option of printing on both sides.
5. Default raster angles: C15 M45 Y90 K75.

## PRINT-READY FILES ARE PREFERRED:

- Arrangement of the work on the page/workspace.
- The work must be placed centrally on the page.
- Margin from the grid to edge of the page - same on each side: 10mm.
- The background of the workspace should be filled with colour 0/0/0/0 with the overprint option turned off.



## STAGES OF ACCEPTING PRINT REQUEST:

- SOFTPROOF:
  - Request for printing is accepted only in writing, e.g., by e-mail;
  - differences resulting from individual settings of the customer's computer, for example with regard to colour;
    - or proportions, cannot be the basis for a complaint about the purchased goods;
  - after accepting the request and approving the text composition, we do not accept complaints related to errors;
  - Granpak is not obliged to assess the correctness of texts submitted for printing and search for possible errors;
  - 2 corrections of the files are included in the price of the package, next corrections are charged according to individual arrangements with the customer;
  - the printing house is not responsible for checking the graphics for preparation in accordance with the guidelines of commercial networks.
  
- HARD-PROOF:
  - colouring of the finished product should be as close as possible to the colouring of the proof, taking into consideration the specifics of the proof printing, type of printing substrate, finishing with foil or UV varnish and other factors having an impact on the colouring of the print. The proof print does not reflect the Pantone secondary colours. Such a colour proof is considered correct if it does not deviate significantly from the colour chart. Pantone colours on the proof are only a representation of the colour and are not the basis for a complaint of the final print;
  - proof does not reflect the raster effect;
  - representation of black and grey is close to the final print.

