

FILE SPECIFICATION FOR PACKAGING PRODUCTION AT ERBI SP. Z O.O.

This document consists of two parts.

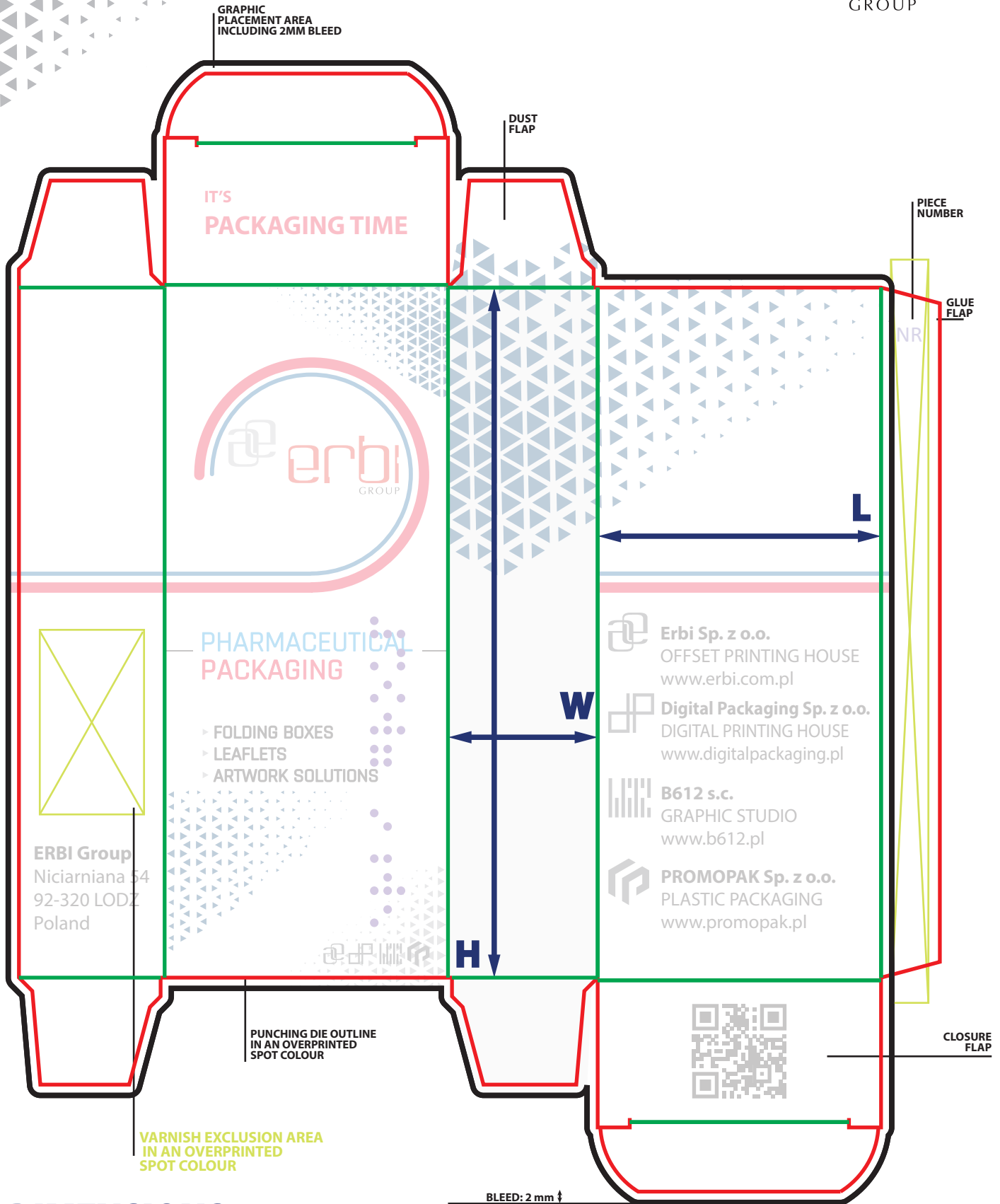
The first part includes general guidelines for preparing print files for offset-printed packaging (colour printing), while the second part specifies additional requirements for enhanced graphic elements (embossing, hot stamping, etc.)

Method of submitting print materials:

- **E-mail to the address: artworks@erbigroup.com**
- **Sharing via, for example, the client's FTP server**

FILE PREPARATION REQUIREMENTS

1. We accept only PDF files that contain a single page and are compliant with the PDF/X-4:2010 standard.
2. Graphics in the file at a 1:1 scale relative to the expected print.
3. Carton dimensions should be provided in the following order: LxWxH mm
4. The punching die grid should be defined as a spot colour with the overprint option enabled.
5. Bleed in the graphics – 2 mm.
6. All text in the graphics should be at least 2 mm away from creasing and cutting lines.
7. Bitmap resolution should be no less than 300 ppi.
8. Printing elements may only be in CMYK and/or Pantone colours.
9. Non-printing elements should be in additional technical colours, e.g., cut, crease.
10. A dispersion varnish exclusion area should be marked as an "envelope" in a spot colour named "varnish-free area".
11. The file must not contain any ICC profiles.



DIMENSIONS:

LxWxH

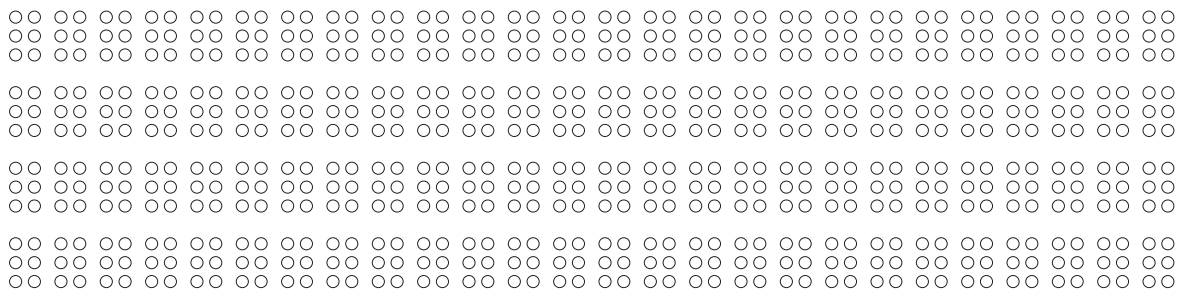
- Cutting
- Crease
- Bleed

12. The minimum font size for printing with a single colour is: 5 pt.
The minimum font size for printing with more than one colour is: 8 pt.
13. The minimum allowable thickness for a single-colour printed line is 0.15 mm.
Lines created in reverse or using more than one colour must be at least 0.3 mm thick.
14. Files must have correctly defined geometry: Media box, Bleed box, Trim box.
If the document contains a CropBox, it must have the same value as the MediaBox.
15. White text and lines must not have the overprint attribute enabled.
16. Texts in 100% black smaller than 12 pt should have the overprint option enabled.
17. Any 100% black graphic element with an effective line width smaller than 2 pt should have the overprint attribute enabled.
18. Total ink coverage must not exceed 320%.
19. For any unaddressed issues, the GWG2015 guidelines apply.

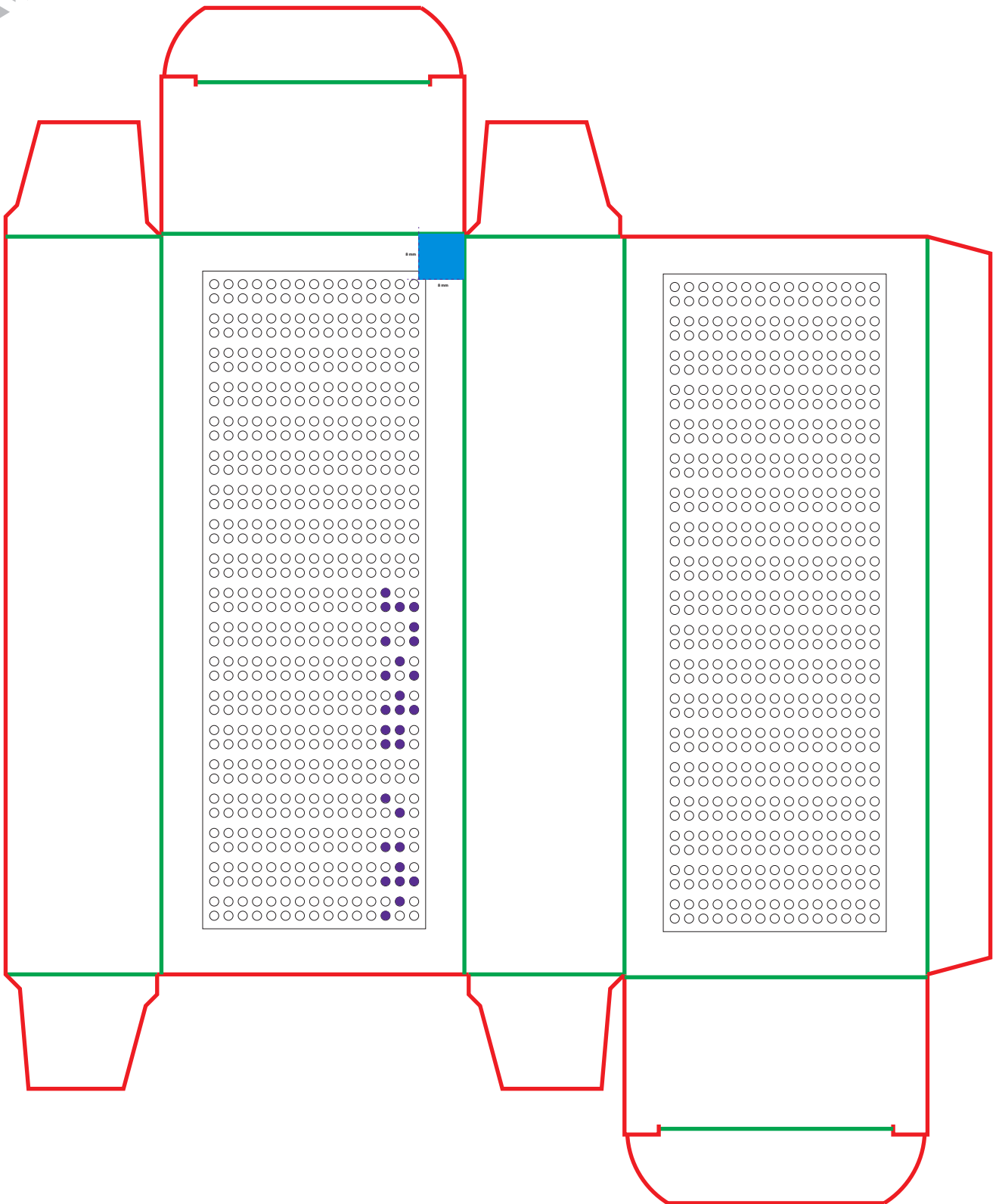
ENHANCEMENT REQUIREMENTS:

1. **SPOT VARNISH (e.g. UV varnish, textured varnish)** – spot varnish elements must be vector-based, in a spot colour, with the overprint option enabled.
2. **VARNISH WITH AN EXCLUSION AREA** – for a dispersion varnish exclusion area, define it using an additional spot colour (“envelope” with overprint enabled) - as illustrated above. For varnishes other than dispersion, a mask including the exclusions is required – created using a spot colour.
3. **HOT STAMPING** – hot stamping elements must be vector-based, in a spot colour, with the overprint option enabled.
 - Minimum line width: 0.2 mm
 - Elements in negative: minimum line width 0.35 mm
 - Hot stamping elements must be positioned at least 2 mm away from the cutting and creasing lines.
4. **EMBOSSING** – embossing elements must be vector-based, in a spot colour, with the overprint option enabled. The minimum line thickness and spacing between embossed elements must be 0.4 mm.
Embossed elements must not be placed on the panel that connects to the glue flap.
5. **LAMINATION** – it is sufficient to specify in the file that the carton will be laminated. Lamination is applied to the entire carton, with no possibility of excluding areas such as windows.
6. **BRILLE EMBOSSING** – Braille elements must follow the Medium Marburg standard, in a spot colour, with the overprint option enabled:
 - in a layout parallel to the glue flap: up to 4 lines, each with a maximum of 26 characters
 - in a layout perpendicular to the glued panel: proportionate to the panel size, maintaining an 8 mm margin from the cutting and creasing lines
 - applied to a maximum of two packaging panels.

Maximum grid (1:1 scale):



NOTE – Once Braille has been implemented in the layout, it must not be transformed or scaled.



Braille must be positioned at least 8 mm away from the punching die and adjusted to the matrix (grid).

BASIC DEFINITIONS:

- **Creasing** – creating fold lines on the carton to facilitate later assembly.
- **CMYK** – the primary printing colour model (Cyan, Magenta, Yellow, Black) used in offset printing.
- **CROP BOX** – the area that includes all graphic elements along with printing marks.
- **MEDIA BOX** – refers to the physical medium on which the job is printed, usually a sheet of paper.
- **Cutting line** – the line defining the final product format after die-cutting.
- **Overprint** – printing one colour over another without removing the underlying layer, which is particularly important for black text.
- **Pantone** – a standardised system for defining spot colours.
- **PDF/X** – a specialised version of the PDF format optimised for professional printing.
- **ICC Profile** – a file containing the colour characteristics of a device, printing substrate, or graphic file to ensure colour consistency across different devices.
- **DPI Resolution** – the number of dots per inch, defining the quality of raster graphics. It is primarily used to describe a printer's output capability, specifically the "resolution" at which it can print.
- **PPI Resolution** – the number of pixels per inch, describing the resolution and ability to capture fine details in digital images.
- **Bleed** – an extra margin (2 mm in this case) beyond the cutting line to prevent unwanted white edges after trimming.
- **TRIM BOX** – the area defined in a PDF file that specifies the final net format after trimming.
- **Trapping** – the minimal overlap of colours that prevents the formation of gaps between adjacent colours.

FILE SPECIFICATION FOR LEAFLET PRODUCTION AT ERBI SP. Z O.O.

This document outlines the requirements for preparing print files for leaflets using offset printing (colour printing).

Method of submitting print materials:

- E-mail to the address: artworks@erbigroup.com
- Sharing via, for example, the client's FTP server

FILE PREPARATION REQUIREMENTS:

1. We accept only PDF files that are compliant with the PDF/X-4:2010 standard.
2. Graphics in the file at a 1:1 scale relative to the expected print.
3. Leaflet dimensions should be specified as width × height, with a tolerance of ± 1 mm. For folded leaflets, the final folded dimensions must be additionally specified.
4. The total project size consists of the standard size + 2 mm bleed on each side.
5. All text in the graphics should be at least 2 mm away from the cutting lines.
6. Files must be saved without colour marks.
7. For multi-page publications, each page should be placed on a separate page of the PDF file.
8. The resolution of colour bitmaps should be no less than 300 ppi.
9. Files should not contain embedded additional profiles (or should have the specified profile "Coated Fogra 39 (ISO 12647-2:2004)").
10. Bitmaps included in the PDF must be saved in CMYK mode, 8-bit per channel (using 16 or 32 bits per channel may cause printing errors).
11. Printing elements may only be in CMYK and/or Pantone colours.
12. Non-printing elements should be defined as additional technical colours, e.g. cut, folding, with the overprint option enabled.
13. Deep black colour in the design: C:40% M:40% Y:40% K:100%.
14. Black font in the design: C:0% M:0% Y:0% K:100%.
15. For CMYK-coloured texts, the minimum font size is 8 pt. Below this size, fonts should be used only in a single colour, e.g. K:100%.
16. Fonts should be converted to outlines.