# Create print data for folding boxes correctly

## Before you start designing ...

First of all, please think about the handling of the box. How does the potential customer get to see the packaging for the first time? Standing up or lying down? From which side should the box be opened? The main or front side of a folding box is the wide side not immediately adjacent to the glue tab. If you were to choose the side directly adjacent to the glue flap, the view when looking at the main side will be disturbed by the side edge of the carton, which is glued to the glue flap. This part of the folding box is therefore the back side. Also make sure that the printing on the lid and bottom flap is properly placed when closed. The best way to do all this is to use the dummy that you usually receive from us. The die-cutting contour may be rotated, but not mirrored. Do not make any changes to the punching contour. If dimensions need to be changed, please contact us. Text, characters and logos that turn black should also be made up only of the black portion and not proportionally of the 4 basic colors. The same applies in particular to any EAN barcodes that may be placed. The problem-free readability at scanner checkouts is by far higher if the line combination consists of one flat color instead of several straight colors, because the edge sharpness is no longer given by the halftone dots. If black areas are to be "glossed", it is quite sufficient if max. 40% cyan is underlaid. An application of all 4 colors exceeds the maximum color application and is not feasible during printing and must be reduced by us time-intensively.

## Image data

TIFF, EPS and JPEG are preferred file formats. When saving JPEG data, always select the highest possible quality level, as a lower level may save on data volume, but data information is irretrievably lost. As a general rule, all image data used should have a minimum resolution of 300 ppi and be separated in CMYK. If there is text in the image file (pixel data), the resolution can and should be higher (approx. 600 ppi) for better edge sharpness of the font. A compromise between quality and processable file size may have to be found here.

## PDF creation

The preferred data format is PDF, which is correct in stand, bleed, color distribution and for output to high-end imagesetters. It should be noted that not all programs generate PDF data in a form that allows output to high-end imagesetters and printers. The most common program for PDF generation is Adobe Acrobat Distiller. For this purpose, a setting for Distiller tailored to our system can be downloaded from www.ebrocolor.de. When generating Postscript, be sure to use an output resolution of 2400 dpi.

## Layout data

We can also accept documents from InDesign, Quark-X-Press and Illustrator as open files. As a rule, we are always up to date with the latest version. However, it is absolutely necessary with open data that all image and graphic files used are supplied and all fonts are converted into paths. The inclusion of fonts should be avoided, as this is not legally protected and often causes problems during installation.
For the transfer of documents from other typesetting and graphics programs, we recommend the file formats PDF or EPS. From experience, layout data created with Photoshop are only suitable to a limited extent and have reduced quality. This is extremely noticeable in texts, which no longer have sharp edges due to pixelation. Therefore, layout programs such as InDesign, Quark-X-Press and possibly Illustrator are clearly to be preferred. Office programs such as Word, Exel, PowerPoint, etc. are completely useless for generating print data.

## EPS generation

EPS files can be exported from all common graphics programs (Adobe Illustrator, Macromedia Freehand, Corel Draw,...). It is important that all text is converted to paths / curves before exporting, and the correct color mode (CMYK) and the desired color distribution is selected.

## Colors

All colors and images must be clearly defined as Pantone colors when printed in CMYK or when spot colors are used.
We cannot integrate profiles supplied with image data because our color management system prevents this due to the calibrations on proofing devices, platesetters and presses.
When you create layout data, please set the document color mode from CMYK from the beginning, never to RGB. An RGB color mode must otherwise be converted by us, which has a consequence of hue shift. A text defined as black in RBG will be split into all 4 primary colors by changing the mode to CMYK, which is not desired.

## Trim

All image and color areas that are laid out right up to the edge of the paper format also require a 2 mm bleed. In the case of die-cut blanks (e.g. for folding boxes), all flaps must also be taken into account here. Only adhesive flaps should remain colorless apart from the trim. We will provide you with the punching contour of your blank for this purpose. This cutting contour must not be defined in CYMK mode, but must be created as a spot color. It is also essential to ensure that the die cutting contour is set to overprint. If you are not quite sure about this, please send us a file with the cutting outline and another without.
Complex integrated punching contours often require time-consuming and thus cost-intensive removal.

## Data transmission

PDF files can usually be emailed without any problems, although the amount of data here should not exceed approx. 10 MB. Larger files please send us on CD / DVD by mail, or use our upload server.
You can request the access data for this from us.

## Important !!!

If you are not the creator of the print data yourself - but possibly have it created by a graphics agency - make sure that the data sent to us for printing is high-end data and has not just been given to you for viewing. Although we can see from a PDF by means of pre-flight that, for example, image data in a lower resolution has been used, we cannot judge whether this is due to a reduction in the amount of data (which is quite sufficient for a viewing PDF), or whether the image data is simply not available in a higher, better quality form. In order to be able to save time and money here, please specifically inquire with your data service provider,
whether this data is intended to be passed on to us. Please do not send us any view data for preliminary checking, as no statement can be made about the usability of the data due to the mostly incorrect color distribution and low resolution.

**Therefore the request to graphic designers and advertising agencies: If you send your customers view PDF's, please point out to them absolutely NOT to forward these to us, but provide them for this the High-end data available!**
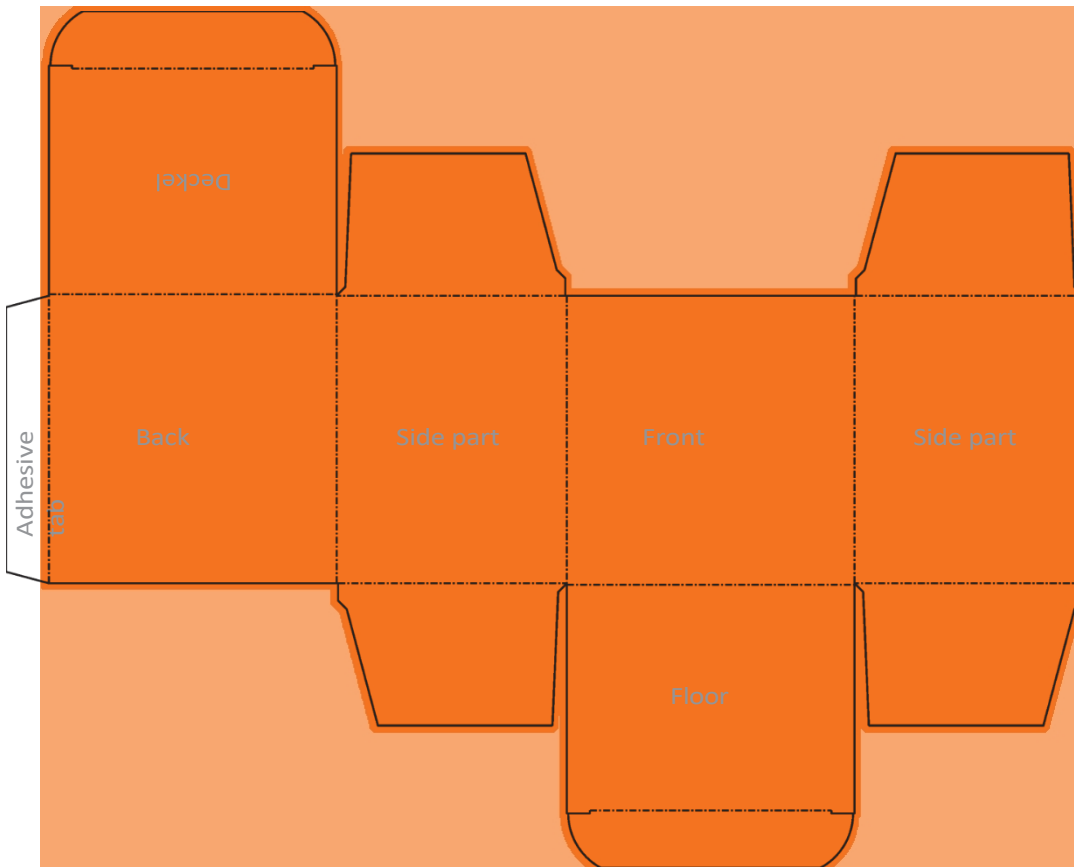
Guidance on the correct placement and creation of the layout.

## Folding box

The side assignment and handling of a folding box is determined by its gluing. In the following example of a folding box with offset tuck-in flaps, the lid, back, front, etc., are marked.

The orange area indicates the trim required if colored areas, photos, etc. are to extend to the punched edge. The trim is 2 mm there, and 3 mm at the gluing tab.
Of course, the trim does not have to follow the punching contour exactly, it can and should fill the entire rectangular format of the punching, e.g. in the case of colored areas. This is indicated by the light orange area.

Guidance on the correct placement and creation of the layout.

## Pillow box

The side assignment and handling of a pillow box is given by its gluing. In the following example, the front, back and side flaps, are marked.

The orange area indicates the trim required if colored areas, photos, etc. are to extend to the punched edge. The trim is 2 mm there, and 3 mm at the gluing tab.
Of course, the trim does not have to follow the punching contour exactly, it can and should fill the entire rectangular format of the punching, e.g. in the case of colored areas. This is indicated by the light orange area.