How to correctly compile print data for folding cardboard boxes

Before you start designing...
Please start by thinking about how the boxes will be handled. How will potential customers experience them for the first time? Standing or lying down? Which side will the box open on? The front side of a folding box is the broad section which does not directly adjoin the glue flap. If you were to select the side directly adjacent to the glue flap as the front side, the view thereof would be spoiled by the edge of the side wall attached to the glue flap. That side of the box is therefore to be made the rear side. Please ensure that images to be printed onto the top and bottom flaps are correctly positioned when those flaps are closed. The best way to ensure this is to check their positioning on the dummy (which you will generally receive from us further to receipt of your specifications). The dieline may be rotated but not used in mirror-image format. Do not make any modifications to the dieline (contact us if any dimensions require modification). Text, characters and logos to be printed in black should consist of black only (i.e. not of a combination of the four basic colors). The same applies to any EAN bar codes used. Readability at scanner-equipped tills is far better if the lines consist of one color and not a number of rasterized colors. The reason for this is that the use of additional colors reduces edge sharpness due to the spacing between dots. A maximum of 40% cyan is sufficient if black sections are to be "brightened". The application of all four colors exceeds the maximum possible color application, is not printable and requires time-consuming reduction on our part.

Image data
Files are preferably to be delivered in TIFF or EPS format. The highest possible quality setting is to be selected when saving as JPEG files, as the use of a lower setting (e.g. in order to reduce file size) leads to irreparable data loss. In general, all image data used should have a minimum resolution of 300 ppi and be separated into CMYK colors. A higher resolution (approx. 600 ppi) can and should be selected in the case of image files (pixel data) including text, as this will deliver greater character edge sharpness. In some cases it may be necessary to find a compromise between image quality and processable data quantity.

Layout data
We prefer to receive documents created in Quark-X-Press, InDesign and Illustrator as open files, and generally run the most up-to-date software versions. In the case of open data, it is imperative that all image files, graphic files and fonts used are provided to us or that all characters are converted into paths. The latter scenario is preferable. We recommend the use of PDF and EPS file formats in instances where documents need to be transferred out of other typesetting or graphics programs.

PDF file creation
It is to be noted that not all programs create PDF files in a format suitable for output through high-end exposure devices and printers. The conventional PDF creation program is Adobe Acrobat Distiller, and a Distiller setup tailored to our system is available to download from www.ebrocolor.de. When creating postscript files, please ensure that the output resolution is set to 2400 dpi.

EPS file creation
EPS files can be exported from all standard graphics programs (Adobe Illustrator, Macromedia Freehand, Corel Draw, etc.) It is important to ensure that all text is converted to paths and curves prior to export.

Colors
Scale printing requires all colors and images to be in CMYK format or, if special colors are used, clearly defined as Pantone colors.
For reasons of proof device, exposure device and printer calibration, our color management system prevents the incorporation of profiles delivered together with image data.
When compiling layout data, please be sure to set the document color mode to CMYK from the outset – DO NOT USE RGB. If you do not keep to this guideline the RGB color mode will have to be converted at Ebro Color, which in turn will lead to a shift in color. Text defined as black in RGB mode is split into all 4 basic colors when converted to CMYK mode; this is not a desirable situation.

Trim area

All images and colored sections which extend right up to the edge of the paper/cardboard also require a 2 mm trim area. Consideration of all flaps is required in the case of die-cut items (e.g. folding cardboard boxes). With the exception of trim areas, only glue flaps remain without color. We provide you with the dieline for your design in the form of an EPS file. The dieline must be removed from the document once the print data has been set. Ideally, we prefer to receive a PDF, EPS or TIFF file containing an outline as a means of orientation and a separate print file without an outline. At the very least the dieline should be defined by a separate color or be positioned on a separate layer so that we can remove it with a minimum of fuss. The removal of fully integrated dielines is often very time-intensive – and therefore costly.

Data transfer

PDF files can usually be emailed without any problems, but should not exceed 40 MB of data. Larger files should be saved to CD/DVD and posted to us or made available on our upload server.

IMPORTANT NOTICE

If you have not compiled the print data yourself (e.g. if you have had it compiled by a graphic design agency), please ensure that the print data you send us is high-end data and not just lower-quality data made available to you for approval. Though we are able to use pre-flight software to detect the use of low-resolution image data in a PDF, we are unable to judge whether or not the low resolution is the result of a reduction in data quantity (perfectly acceptable in the case of a PDF sent for approval) or the non-availability of the image data in a higher quality form.

We therefore make the following request to graphic designers and advertising agencies: When sending PDF files to your clients for approval, please make them fully aware that they should NOT pass them on to us, and should instead send us the high-end data made available to them by you.
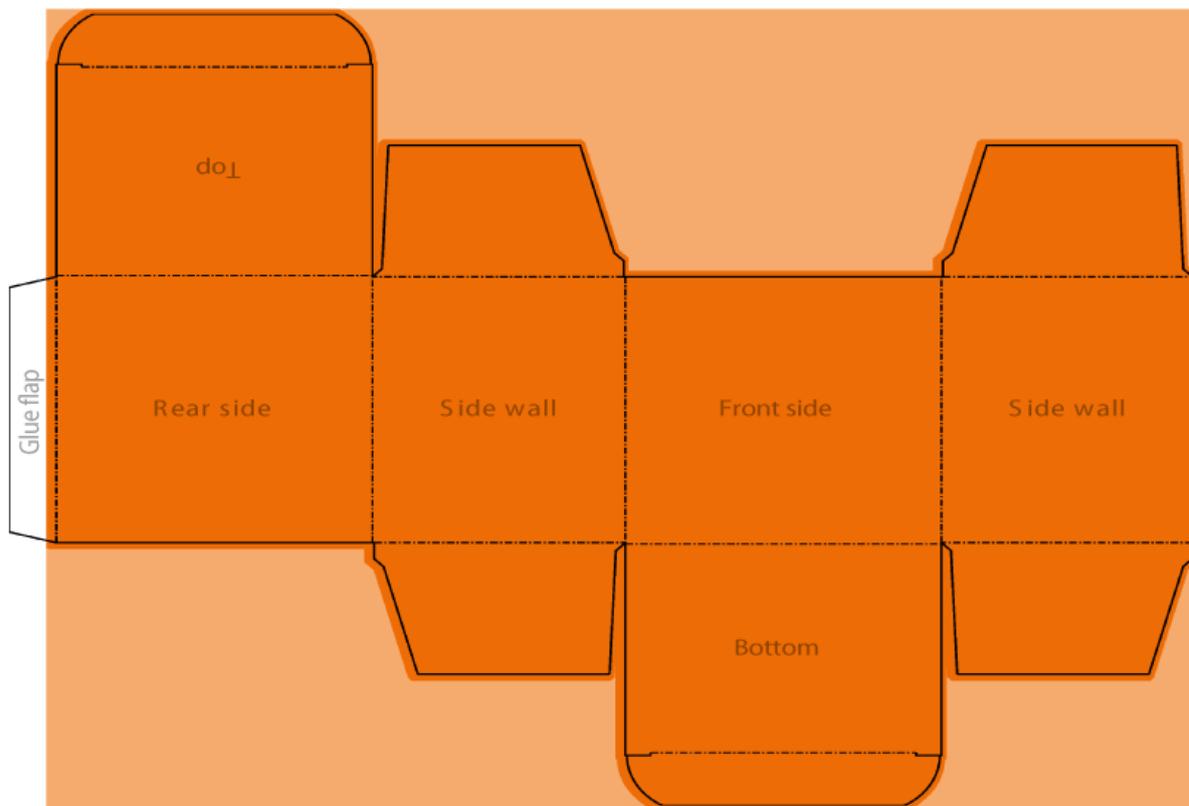
Guidelines on correct component positioning and layout design

Folding cardboard boxes

The way in which a folding cardboard box is laid out and handled is dictated by the way it is glued.
The top, bottom, front side, rear side, side walls and glue flap are marked in the following example.

The darker orange area indicates the trim area required if colored sections, photos or similar elements are to reach right up to the dieline. The trim area is 3 mm wide at the glue flap and 2 mm wide in other areas. This naturally does not mean that the trim area needs to lead exactly along the dieline, and indeed it may and in some cases should full the entire preform (e.g. in the case of colored sections). The non-box area of the preform is designated by the lighter orange color.

Guidelines on correct component positioning and layout design

Pillow boxes

The way in which a folding cardboard box is laid out and handled is dictated by the way it is glued.
The front side, rear side, inner flaps, outer flaps and glue flap are marked in the following example.

The darker orange area indicates the trim area required if colored sections, photos or similar elements are to reach right up to the dieline.
The trim area is 3 mm wide at the glue flap and 2 mm wide in other areas.
This naturally does not mean that the trim area needs to lead exactly along the dieline, and indeed it may and in some cases should full the entire preform (e.g. in the case of colored sections). The non-box area of the preform is designated by the lighter orange color.

Glue flap

Outer flap

Inner lap

Front side

Rear side

Outer flap

Inner lap