



This specification is based on the GWG2015 -Packaging Specifications laid down by the Ghent PDF Workgroup. Their web site can be found at <u>www.gwg.org</u>.

The objective of this specification is to ensure the timely processing of your artwork and to prevent additional costs arising from incorrect file preparation.

Please note that you are responsible for the quality control of approved repro ready artwork files supplied to us. While our pre-flight procedures might raise problems with the files supplied, it is not our responsibility to conduct any quality control procedures on these files. Any additional process (e.g. varnishes, embossing, or foiling) should be on a clearly marked separate layer within the file.

SUPPLYING DIGITAL ARTWORK

FILE FORMAT

To ensure an efficient workflow and to allow us to process supplied artwork quickly, artwork must be supplied in PDF format. Files supplied must comply with the PDF/X-4:2010 standard as defined by ISO 15930-7:2010.

We advise you to use direct PDF export from within the native application. If direct export is not an option within your workflow, we can provide a Distiller JobOptions file on request. The PDF must not be created with the Adobe PDFWriter product. The PDF file should not contain more than one page.

FILE NAMES

All files sent to us must be clearly and logically named. Please start the filename with the customer name and ensure that the file name also includes any actual product code. Please make sure that the filename has a .pdf suffix and that the following characters are omitted in the filename: Λ :*?"<>

FILE SUBMISSION

Please ensure that all files are submitted by the date advised on our Order Acknowledgement as delays in receipt may affect our ability to meet the delivery date requested.

Files up to 50MB in size can be emailed to sales<u>@bridger.co.uk</u>. Alternatively, or for larger files, please use one of the many free web based utilities such as:

- Mailbigfile (<u>http://www.mailbigfile.com</u>)
- Dropbox (<u>https://www.dropbox.com</u>)
- Mediafire (<u>http://www.mediafire.com</u>)

and send us the link so that we can download the file. Please ensure that you maintain a copy for your own records.



ARTWORK PREPARATION

PROFILE / CUTTER GUIDE

Artwork should always be prepared to, and contain, a cutter profile supplied by us which has been approved by you without change. Cutter guides are available on request via email and these will be supplied in PDF format as standard. Other formats may be available on request. The supplied profile must not be altered or resized in any way, including the addition of any apertures and cutouts, as any changes may result in both additional tooling charges being levied or possible production delays.

The cutter profile should be set in a non-printing ink colour and included as a separate layer within the PDF file.

DISTANCES FROM CUTTER PROFILES

Ideally, text and other graphic details should be kept 2mm away from any profile line.

BLEED

Any part of the artwork touching a profile edge should be extended by 2mm outside the edge. This is referred to as "bleed". Bleed should also be extended by 3mm on to the glue seam.

Where cartons are nested onto a sheet, bleed may sometimes extend from one carton onto a part of an adjacent carton which is not visible once the carton has been erected. If you do not wish for this to happen, it is essential to notify us before any tooling or board is purchased.

IMAGES

All continuous tone or greyscale images must be high resolution at a minimum of 300 dpi at actual print size. Images above this resolution will be downsampled. Please make sure all images are supplied as CMYK and special colours. RGB images are not suitable for litho print and as a colour change is possible to occur during conversion to CMYK, please do not include such images within your file.

Line-art or bitmap images should be at least 3600 dpi at actual print size. Images may be compressed using ZIP or CCITT compression.

LINE ART

Minimum line widths are 0.15 mm when printed in one solid colour or 0.30 mm when printed using one screened colour or where the line art is composed of multiple colours or where the line is reversed out.

Thin black lines less than 2mm should be set to overprint.



FONTS AND TEXT

All fonts used should be embedded within the file. OpenType fonts must not be used. It is preferable to embed the entire font rather than a subset of the font into the file. Embedding the whole font will allow us to make changes to your text at a later stage, if required. Fonts supplied as outlines cannot be verified to meet the requirements below and may result in illegible text after printing.

Minimum point sizes are: 5 pt (one colour text); 8 pt (multiple colour text). Point sizes should be increased by 1 pt when reversing out text or when using light sans fonts.

Serif fonts should ideally be avoided, but if the are required then the pint sizes above should be increased by 1 pt.

Black text less than 12pt should be set to overprint.

Text smaller than these point sizes may start to fill in making it difficult to read.

The file must not contain white text set to overprint.

These specifications are requirements for legibility of text after printing and are not to be used in place of any legislation or good practice that may cover the end use of the printed product. It is the responsibility of the artwork supplier to ensure all text meets any size requirements.

SCREENS AND VIGNETTES

Screens should be kept between 5% and 95%. Any screen above 95% is likely to become a solid and a screen of less than 5% is likely to be too small to print. Vignettes should be between a minimum of 1% and a maximum of 99% (not white to solid).

MAXIMUM INK COVERAGE

To give the best print results for litho, it is recommended to keep the maximum ink coverage to no more than 320%. If you have any areas within your design which exceed 320% coverage, UCR (Under Colour Removal) should be applied to reduce the ink coverage to an acceptable level.

INK/VARNISH FREE AREAS

All ink and varnish free areas required by us will be shown on our cutter profile. If you are using your own profile please ensure that the rest of the glue seam and any other areas that are to be glued (either by us or in the final filling process) are ink and varnish free. If also required, please make sure that any 'best before' or other areas used for coding purposes are also kept ink and varnish free.



SPOT COLOURS

Pantone Colours

All Pantone spot colours should be referenced with the correct Pantone (PMS) colour and should have a 'C' suffix if used on a coated surface or 'U' suffix for an uncoated surface. We will use the appropriate ink reference during printing, and all printed Pantone colours will be compared to Pantone digital spectral data.

Other spot colours

Special or "house" colours should be accompanied by an appropriate sample from which a draw down from our ink manufacture will be produced for your approval. Where possible CxF data files should be emailed to us for special colours. The email should be sent to <u>sales@bridger.co.uk</u> and should clearly indicate the artwork file(s) to which they relate.

Please remove all unused colours.

Please be aware that the final printed result will only represent a good commercial match due to variation caused by the substrate used for the production of your item and any varnish/coating applied.

VARNISH

If you would like to enhance or protect your printed item with either a water-based emulsion coating or UV Varnish, please include a varnish image, set in a non printing colour or technical ink, in a separate layer, suitable named (e.g. Matt Varnish or UV Varnish) and set to overprint. Every varnish required should each have their own layer.

If a spot varnish is required then minimum text point size should be 10 pt and minimum line width should be 0.5 mm.

Point sizes should be increased by 1 pt when varnishing light sans fonts.

Serif fonts should ideally be avoided but if the are required then the numbers above should be increased by 1 pt.

Please ensure that any reversed out areas in the varnish layer are setup as a compound line.

EMBOSS & DEBOSS

If any embossing or debossing is required please include a suitable image, set in a non printing colour or technical ink, in a separate layer, suitable named (e.g. Emboss). The minimum distance from a profile line is 10 mm.

Please ensure that any reversed out areas in the emboss layer are setup as a compound line.



FOIL BLOCKING

If any foil blocking is required please include a suitable image, set in a non printing colour or technical ink, in a separate layer, suitable named with the correct foil colour (e.g. Gold Foil (K1)).

If you wish to foil block text than the minimum text point size is 8 pt. The minimum line weight is 0.5mm.

Point sizes should be increased by 1 pt when using light sans fonts.

Serif fonts should ideally be avoided but if the are required then the numbers above should be increased by 1 pt.

Foil blocking should not be used on top of metallic inks.

Foil blocking cannot be applied to the first 30 mm of any printed sheet. It is therefore essential to notify us if any foiling is going to be required within 30 mm of any edge of the profile of the carton before any tooling or board is purchased.

Please ensure that any reversed out areas in the foil blocking layer are setup as a compound line.

TRAPPING AND DOT GAIN COMPENSATION

Please do not apply any trapping or dot gain compensation (DGC) to artwork supplied to us. We will trap the artwork, as required, at the reproduction stage and will apply the appropriate amount of dot gain compensation necessary to suit the individual press used in the printing process.

PRINTER'S MARKS

For identification, quality control and traceability purposes we will add our house mark, and other identification and quality control barcodes and text to areas of the carton that are not visible when the finished product is glued and erected. Please inform us when you submit your artwork if you do not wish us to apply these.

FSC

If required FSC logos can be provided as a PDF file for use on artwork submitted to us. There are strict rules regarding the use of this logo and this logo can only be used for artwork on products supplied by us. These supplied logos will contain our license number and must be shown in the format "FSC[®] C108760".



ADDITIONAL ITEMS

Unless otherwise requested we will use a screen of 150 lines per inch and use a round dot with hybrid stochastic screen at low dot percentages, using the following screen angles:

Cyan 75° - Magenta 15° - Yellow 0° - Black 45°

Standard print order is:

Black – Cyan – Magenta – Yellow – Spot Colour 1 – Spot Colour 2

However if there is a metallic ink used the order will usually be:

Metallic – Cyan – Magenta – Yellow – Spot Colour 1

Standard target ink densities are:

Cyan 1.35 Magenta 1.40 Yellow 0.95 Black 1.8

BARCODES

If you are supplying a barcode, please ensure the barcode is generated following the guidelines published by GS1uk (<u>www.gs1uk.org</u>). These guidelines will provide you with information regarding the suitability of barcode colours and background colour combinations.

On all barcodes a bar width reduction of 25 microns is required to compensate for pressure addition to the bars in the litho printing process. Please ensure that the correct print free area is incorporated around the barcode.

If there is insufficient space for a full height barcode, the bars can be truncated (i.e. cut off from the top) to leave a minimum bar height of 16mm. Ideally barcodes should be a minimum of 8 mm from a seam or packaging fold.

The barcode should be generated at the required final size. Barcodes should never be reduced or enlarged after generation and should never be scanned from another source.

If you do not have the facility to produce your own barcodes, our Prepress Studio can generate most types of code in-house and insert them in the final design for you. If you require this service, please supply the following information with your artwork:

Type of barcode:	e.g. EAN-13, UPC-A, Pharma code etc.
Code number:	Full code including check digit.
Size of code:	Range between 120% - 80% scale in 5% increments.
Position:	This should be indicated on a proof or within the digital file.
Light margin indicator:	Yes or no.
Colour:	Please specify barcode colour and background colour required.