



Artwork Submission Guidelines & Print Specifications



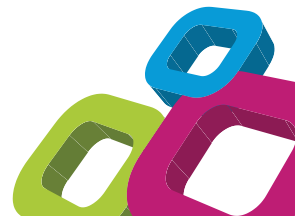
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INTRO

The team at OPM know that a great deal of time and effort goes into creating the perfect design for your packaging, and our goal is to make the transition from concept to finished print simple and successful. We have extensive expertise in working with businesses of all sizes, helping them shape and define the best approach for new brand development projects. Our Teams skill set is based on an in-depth understanding of artwork for print, materials, inks and guidance on finished print requirements across a number of product sectors.

By taking the time to understand the capabilities of our equipment and by clearly communicating your expectations, you can greatly reduce lead times, eliminate errors and production costs.

ACCREDITATIONS

OPM is driven by continuous improvement in the development of people, processes and systems. Within a framework of Total Quality Management, all of our products are produced to ISO 9001:2015, ISO 14001, BRC/IoP Global Standard Food Packaging standards Grade AA+ and PS9000:2016 are printed using low migration/ Food Grade Inks.

BEFORE YOU START...

- Make sure that you have an accurate cutter outline or pack layout template.
- Familiarise yourself with any packaging regulations and restrictions that apply to your product.
- Review and understand this document prior to submitting artwork.

BEFORE YOU FINALISE YOUR DESIGN...

We encourage you to include our Technical Team in your design process and would welcome the opportunity to arrange a Teams call with your team.

We invite you to forward first stage pdf files to us for review, prior to final artwork approval.

We can review your design and help pinpoint elements that might not reproduce well on press, giving you the opportunity to make adjustments that adhere to the integrity of your design prior to submitting the design for your customer's final approval or to print.

Accepted file formats:

- Adobe® Illustrator® is the preferred file format.
- Esko normalised pdf
- PSD (as format including layers) *for linked images only*
- Tiff (as format including layers) *for linked images only*
- EPS (*without compression and vectorized i.e. illustrator.eps*)
- InDesign*

*Adobe® InDesign® files are acceptable, however, please be advised that they must be exported for use with Adobe® Illustrator®. InDesign is excellent for typesetting and building multiple page documents, however, they are not ideal for package design. Placed images within these files often have a low-resolution preview, making exact placement of elements a challenge. If you are using special plug-ins or custom hyphenation in native applications to achieve the final result, save the file in a format that will not be dependent on these plug-ins.



Links

- Support files must be supplied for all placed images, including those that are embedded. Photoshop® support files should be 300 dpi at the size at which they are placed into the final file. Please keep in mind that the resolution of a raster file decreases proportionally when enlarged. For instance, if a 50mm x 50mm image that is 300 dpi is placed into a file at 200%, the resulting dpi is 150, which is not high enough to reproduce well. When supplying Photoshop® support files, please do not compress the layers in the file.

Adobe Illustrator best practises

Ensure you are working in CMYK mode. (Go to File > Document Color Mode > CMYK Color)

Ensure your Document Raster Effects Settings are correct.

Go to Effect > Document Raster Effects Settings.

Please use the following settings

Color Model: CMYK

Resolution: 300 dpi

Background: Transparent ON

Options: Anti-alias ON or OFF, Create Clipping Mask OFF, Preserve spot colors ON.

NB. Please avoid using 'Flatten Transparency' on any objects. This will make processing your artwork more difficult creating time delays, and may impact quality. Images will be embedded and fragmented, making editing difficult and time consuming.

Layer structure

Before sending files please delete unused layers and separations to avoid any confusion. A clear and logical structure of layers is requested and helpful for any work with all DTP programs. See list below as an example:

Artwork layer: all printing elements necessary for the design.

Variable layer: one layer for each text variant, e.g. different languages.

White / varnish layer: If your artwork contains a pattern white or varnish, please separate.

Keyline/cutter guide layer: acts as a dummy for the actual linework design.

Legend layer: general information about the order, sizes, colours etc.

Eyemarks: Flexible packaging will usually require an eyemark, check size / position and colour with product packer.

Emboss/Hot Foil tooling layer: If your artwork contains emboss or foil tooling then please place vector graphics for these on separate layers.

Colour spaces / profiles

- CMYK

Preferably create coloured elements, graphics and images suitable to specific CMYK colour space. Please ensure RGB mode objects are not present in your artwork.

Colour names

Artwork must be separated CMYK and if Spot colours are required, we encourage the use of Swatch libraries available within your software. Please show and name well-defined spot colours as real spot colours. E.g. Pantone 485 C. Please also delete any unused swatches from the file. When your spot colour does not exist in the swatch library for example "White" or "Varnish" this is acceptable. Avoid using multiple names for the same colour in your document unless more than one ink of the same name is required. Ensure that spot colour names within linked files match those in your page layout application. Do not apply overprint to white objects, unless you have specified special opaque inks.

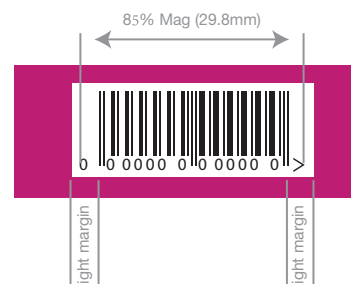


Fonts

All artwork files should be sent 3 ways where possible: One file converted to outlines or paths, a pdf with fonts embedded for reference and to enable text alterations please include the live text version of the artwork file. Text should always be created in a vector format. Text created in Adobe Photoshop® or any other raster-based program, will have jagged, rastered edges, making smaller text particularly difficult to read. Vector based graphics and text will have smooth edges.

Barcode Information

We cannot verify EAN13 barcodes under 85% magnification Please ensure all barcodes have sufficient light margin (Quiet zone).



Bar Width Reduction should be set at:



Quiet zone is to be created following the ISO standard. Your barcode creation application should have this parameter pre-defined.

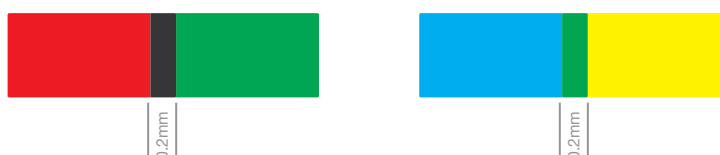
Make sure that the bar code prints in a scannable color. Since most bar code scanners utilize infrared light, avoid using inks with red or orange pigments. If you have questions about the scannability of a certain color, please contact us. For best results, we recommend that bar codes appear on a white background. Codes on metalized colours (backgrounds) and negative codes are not allowed.

Trapping (Flexographic Printing Only - see page 13 for Digital print specification)

We work on a standard spread / choke of 0.2mm. The OPM Group utilises an electronic on-press registration system to monitor and correct registration during the course of a press run, resulting in outstanding registration capabilities. However, absolutely perfect registration is difficult to achieve on a flexographic press, therefore certain measures need to be taken to ensure that the design is not negatively affected by slight misregistration. Trap refers to the slight overlap of elements in a design, which occurs wherever elements on different plates are adjacent to one another. Trap prevents gaps from appearing in the print in the event of slight misregistration on press.

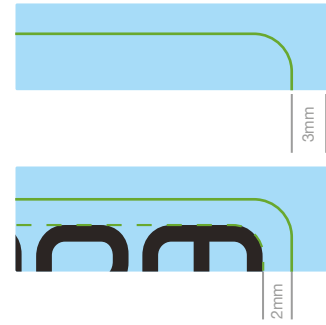
For instance...

- Trap can be particularly noticeable between two colors that are of medium hue, such as red and green. A small, darker line may be visible where the two elements abut.
- Blue and yellow elements placed next to one another may result in a green trap line. If you have questions about how trap may affect your particular design, please contact us!



Bleed / Print to cut

We use a standard 3mm bleed of background artwork beyond the cutter profile edge to allow for any movement of the cutter / slitting. Please do not place any important text / images closer than 2mm away from cut / slit.



Minimum type size 1 ink (Flexographic Printing Only - see page 13 for Digital print specification)

Positive type = 4pt

Positive

Negative type = 4pt*

Negative

*When creating small reversed out text it is advisable to add a 0.05mm white stroke to ensure legibility.

Minimum type size multiple inks (Flexographic Printing Only - see page 13 for Digital print specification)

Positive type = 6pt*

Positive

Negative type = 6pt*

Negative

*When creating text from more than 1 ink try to keep the text character stroke as thick as possible minimum 0.25mm and keep to as few inks as possible, also try to ensure at least 1 solid 100% ink.

Minimum keyline thickness (Flexographic Printing Only - see page 13 for Digital print specification)

Positive keyline = 0.15mm

Positive

Negative keyline = 0.3mm

Negative

Minimum keyline thickness - For Screen Printing (Design Dependent - OPM to Evaluate)

Positive keyline = 0.3mm

Positive

Negative keyline = 0.6mm

Negative

Minimum Type Size - For Screen Printing (Design Dependent - OPM to Evaluate)

Positive type = 6pt(sans serif)

Positive

Negative type = 8pt(sans serif)

Negative

Artwork checklist

To maintain the highest quality and avoid delays, please ensure you have completed all of the following checks!

- ✓ Artwork is to 100% scale.
- ✓ The artwork is separated to its intended printing inks.
- ✓ Remove all unused colours.
- ✓ All images have an effective resolution of 300ppi.
- ✓ All linked files are included with the artwork.
- ✓ All images are in CMYK mode, and if required, include Spot channels
- ✓ 3 is the magic number of files - Outlined text, live text and PDF
- ✓ Cutter profile is present in the artwork file.
- ✓ Eyemark for flexible packaging is in the correct colour / size / position.



Colour management

Colour management is taken very seriously at OPM, after all we are producing your packaging to your specification and as a result have invested in the latest equipment to ensure initial colour accuracy and reproducibility is always achievable.

To assist OPM in matching colours we utilise an X-Rite eXact photospectrometer, this is linked to X-Rite Colour Quality for recording electronic colour standards, quality control records and checking colour accuracy during production runs, Colour Quality also links to GSE-IMS Version 0.61.1.0, this software takes the colourimetric data from Colour Quality and turns it into an ink formulation that will produce your specific colour at a given ink film weight, to ensure the utmost accuracy and repeatability of formulated inks, the final piece of equipment is a GSE ink dispenser and a mono pigmented ink range to give bright, strong, vibrant formulated colours with reduced metamerism.

Specifying Colour has always been a difficult thing to communicate, OPM can use a Colour Exchange Format (CxF) file to communicate colour faithfully across devices, applications and geographies, therefore reducing colour discrepancies. Please supply CxF files if you have these available to: repro@opmgroup.co.uk.

As well as in house GMG openColor proofing, OPM offers a full ink lab which can supply colour calibrated ink drawdowns on to the correct substrate for colour approval prior to print. The drawdown data is stored and synchronised with the GMG system to ensure colour consistency from proof to print.



Matching Existing Packaging, Colours, Branding

If you have existing packaging and samples you want us to match, please send them to the team in the post with a descriptive brief, so we can create colour matched GMG proofs for approval.



OPM Proof Approval Workflow

Thanks to OPM and GMG proofing systems, we are able to generate proofs identical to the final product for all the products we print, labels and flexible packaging on a multitude of substrates.

OpenColor Proofing service-solutions:

OPM Contract Proofing

The more complex the label or flexible packaging job, the more important it is to check results early in the process, before making plates or printing. OPM use the GMG proof workflow to manage colour expectation and ensure corrections can be made prior to print, minimising cost and effort.

- Proofs are colour corrected to match material substrate to correctly assess widest variety of substrates. (Because we recognise that in reality not everything prints on a glow white substrate). By printing on silver or clear clients can easily identify how “white” will appear on the printed job.
- The proofs accurately shows trapping and overprints’– inks printed on top of each other, previously unattainable, an OpenColor proof can now accurately simulate a printed result.
- Proofs on clear, silver or white substrate. Clear/Silver substrate proofs are invaluable for proofing designs with a pattern white as they show windows in film, or reveal metallic substrate where metallic effects are desired.
- Web-based digital proofing for maximum transparency and faster processes.

Advantages:

- Colours are matched to the actual ink colours mixed for press using spectral data from the ink formulation.
- Smooth exchange of profiles and databases from the OPM fully automated colour management system.
- Reliable/Fits our Esko workflow-processes to speed up proofing process.
- Avoidance of potential high cost interventions.

Ink lab drawdown samples

OPM Ink Lab can supply drawdown samples printed onto correct substrate, these are samples of actual printed ink formulations, metered onto substrate using exact anilox rollers and UV cured the same as our printing presses. This accurately shows the performance of the ink on the substrate. Colours are matched to the actual inks mixed for press with formulation & target data linked to the OPM ink mixing system. Drawdowns can be used as ‘master’ colour standard to share amongst design agencies and other print related suppliers.

Proofing services

All contract proofs supplied to OPM should be produced to OPM’s colour profiles. **Please request OPM’s mx4 profiles by contacting the repro team repro@opmgroup.co.uk** If a proof is supplied to a colour profile that is not on the list below we can’t guarantee an accurate match. Although every effort has been made to achieve a Fogra39L proof due to the nature of the print process this is not possible.

Our proofing system is GMG OpenColor/ColorProof and therefore we can supply MX4 profiles. All our profiles have been calibrated on an Epson 900 series.

When you have received our colour profile (OPM 175 AWP Z&G STD Gloss.mx4) please load it on to your system and before supplying proofs output the OPM test chart. Please send the test chart back to us for verification.



OPM PRINT SPECIFICATION

The following print specification is an overview of the most commonly requested information. If you require anything else please contact our repro department at: repro@opmgroup.co.uk

Our print processes

- UV Flexo - Low Migration Inks / Water Based
- Combination - 2 Screens and 2 Flatbed units for Hot Foil and embossing allows multiple combinations of Rotary Silk Screen / Cold Foil / Hot Foil / Embossing & De-bossing.
- UV Lamination / Solvent Lamination / Water Based
- Digital Inkjet

Available print substrate - (Contact us to discuss Digital Print Materials)

- Paper - Gloss / Semi Gloss / Matt
- PP - Clear / White / Silver
- PE - Clear / White / Silver
- OPP - Clear / White / Silver
- PET - Clear / White / Silver

Many other substrates are available including bespoke constructions.

Inks - (Flexographic Printing Only - see page 13 for Digital print specification)

- Low Migration Mono Pigment
- High Density UV inks & Adhesives
- Gloss, Satin, Matt, Rough Touch, Soft Touch, Reticulating and Blockable Varnishes

Plate material used (67 thou) - (Flexographic Printing Only - see page 13 for Digital print specification)

- Crystal Asahi Plates



- Dupont ESX-R (In The Round)

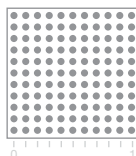


Number of colours available - (Flexographic Printing Only - see page 13 for Digital print specification)

- 14 Colour including combination print option

Lines per inch (lpi)

- 150lpi standard - up to 200lpi



Minimum and Maximum printable dot - (Flexographic Printing Only - see page 13 for Digital print specification)

- 2% Minimum
- 96% Maximum



OPM Peel & Reveal Label Solutions

OPM has advanced combination presses custom built for and dedicated to peel and reveal / pack coupon labels. We can manufacture multi-page labels up to 8 sides (4 pages) featuring both graphics and text.

- OPM work with a wide range of materials and will help you with a specification to suit your product.
- Wide range of shapes, sizes and material options available.
- Printed in up to 14 colours.
- OPM can create a Seven sided printable, 4 layer self-adhesive label.
- Multi-page labels can be produced for both flat and curved surfaces.
- A variety of reseal options.
- Removable label top ply with no adhesive residue.
- Ability to print on four surfaces with the base surface being either a white or clear film.
- Will withstand wet, cold, and humid environments.
- Clear labels left on the product can be printed or transparent.

OPM Sequential Numbering

OPM can apply variable data and sequential numbering to your labels and flexible packaging, for example dating, pharmaceutical coding (traceability), sequencing and promotional codes etc.

When supplying artwork that requires variable sequential numbering please indicate where the data is to appear and supply a database of the required information or indicate what data you wish to appear.

- Indicate clearly where the data is to appear on the packaging.
- Use Windows fonts.
- Data to be supplied in Access, Excel, Textfile, ODBC and SQL format.

To discuss your requirements for Peel & Reveal and/or sequential numbering Please contact our technical team, just ask for Paul Smith , Kevin Walmsley or Darren Horsfield.

technicalteam@opmgroup.co.uk or call on +44 (0)113 237 8031

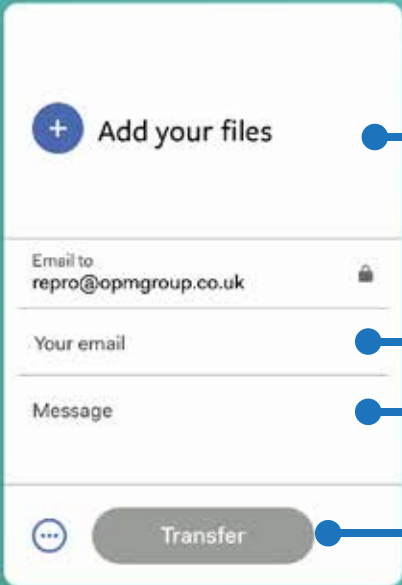


OPM - How To Send Us Files

We have a link so you can transfer your Artwork files quickly and easily to the team at OPM to print your labels and packaging, see the instructions below.

How do I send files to OPM?

Just go to:
opmgroup.wetransfer.com



The screenshot shows a web interface for sending files. It has a teal background. At the top, it says 'How do I send files to OPM?'. Below that, it says 'Just go to: opmgroup.wetransfer.com'. The main part of the interface is a white box with a blue plus sign and the text 'Add your files'. Below that is a field for 'Email to' with the address 'repro@opmgroup.co.uk' and a lock icon. Below that is a field for 'Your email'. Below that is a field for 'Message'. At the bottom is a grey button labeled 'Transfer' and a small circular icon with three dots. Four blue lines with dots at the end point to these elements, each with a corresponding instruction.

- Click on the + sign and add the files you want to send, or, select a folder to upload
- Type your email here
- Write a short message, let us know what you're sending us!
- Hit Transfer, its that easy!



The OPM group logo is located at the bottom left of the teal box. It consists of three interlocking rings in blue, green, and red, followed by the text 'OPM group' in a bold, sans-serif font.



OPM PRINT SPECIFICATION LIST (FLEXO) - SEE NEXT PAGE FOR DIGITAL

Constraint	Value
File Type	Adobe CC, EPS or PDF (up to 1.6)
Total Ink Limit (TAC)	320% Total Area Coverage
Proofing Capability	GMG opencolor
Substrate Colour	Clear/White/Silver
Printing Processes	UV Flexo and Digital Inkjet
Max Visible Colours	14
Max Number of Printing Stations	13 (Ability to Laminate after station 13 if required)
Grip Optimal	0.2mm
Varnish Capabilities	Matt, Gloss, Blockable, Rough/Soft Touch and Highbuild
Foil Stamping	Cold Foiling / Hot Foiling / Hot Melt
Braille Capabilities	Yes, Screen (Rotary & Flatbed)
Deboss/Emboss Capabilities	Embossing & De-bossing.
Bleed Dimensions	3mm
Print Margins	Max Print Width 570mm
Optimum Resolution for Halftone/Line images	600dpi
Minimum Resolution for Halftone/Line images	300dpi
Minimum Line Thickness 1 Colour Positive Image	0.15mm
Minimum Line Thickness >1 Colour Positive Image	0.3mm
Minimum Line Thickness 1 Colour Negative Image	0.3mm
Minimum Line Thickness >1 Colour Negative Image	0.3mm
Minimum Type Size Text 1 Colour Positive Image	4pt
Minimum Type Size Text >1 Colour Positive Image	6pt
Minimum Type Size Text 1 Colour Negative Image	4pt
Minimum Type Size Text >1 Colour Negative Image	6pt
Minimum Actual Height for ® and ™ symbols	Depends on Symbol Line Thickness: 0.15mm
Minimum Line Thickness for Screen Printing	0.3mm (OPM to evaluate design)
Minimum Type Size for Screen Printing	Design Dependent (Typically 6pt sans serif -OPM to evaluate design)
Max Number Required Backing Whites	2
Screen Rulings	200
Trapping/Choking/Spread/Grip Values	0.2
Minimum Printable Dot %	2%
Maximum Printable Dot %	96%
Barcode min/max Magnification	min. X-Wide Dimension: 80%
Barcode Bar Width Reduction Value	-40µm (-50µm against direction of repeat)
Barcode Additional Quiet Zone	0.5mm each side
Surface/Reverse/Adhesive Printing	Yes
Screen Angles	C:7.5°, M:67.5°, Y:82.5°, K:37.5°, Spot: 7°
Plate Polymer Type	Crystal Asahi Plates / Dupont ESX-R (In The Round)
Plate Polymer Thickness	67thou
Anilox Type	Maxflo
Anilox Weights (CM³)	C:3 + 4, M:3, Y:3, K:4, Spot: 6 -7.5
LPI/Screen	CMYK+SPOT: 1200lpi
Ink Supplier and Type	Sun Chemical - UV, Waterbased
Tape Manufacture	3M

Controlled colour viewing booths are used for colour approval.

OPM PRINT SPECIFICATION LIST (DIGITAL)

Constraint	Value
File Type	Adobe CC, EPS or PDF (up to 1.6)
Total Ink Limit (TAC)	N/A
Proofing Capability	GMG opencolor / Digital Sample print
Substrate Types	Clear/White/Silver
Printing Process	Digital
Max Visible Colours	Unlimited - (Cannot print metallic inks - Call to discuss)
Max Number of Printing Stations	6 + WHITE (Extended Gamut)
Grip Optimal	0.05mm
Varnish Capabilities	Matt, Gloss, Blockable, Raised Image, Soft, Rough.
Foil Stamping	Cold Foiling -post print - offline (call to discuss)
Braille Capabilities	Yes, Screen -post print - offline (call to discuss)
Bleed Dimensions	3mm
Print Margins	Max Print Width 333mm (Max Web Width = 340mm)
Optimum Resolution for Halftone/Line images	600dpi
Minimum Resolution for Halftone/Line images	300dpi
Minimum Line Thickness 1 Colour Positive Image	0.1mm
Minimum Line Thickness >1 Colour Positive Image	0.1mm
Minimum Line Thickness 1 Colour Negative Image	0.1mm
Minimum Line Thickness >1 Colour Negative Image	0.1mm
Minimum Type Size Text 1 Colour Positive Image	3pt
Minimum Type Size Text >1 Colour Positive Image	3pt
Minimum Type Size Text 1 Colour Negative Image	4pt
Minimum Type Size Text >1 Colour Negative Image	4pt
Minimum Actual Height for ® and ™ symbols	Depends on Symbol Line Thickness: 0.1mm
Max Number Required Backing Whites	1
1st Backing White Trapping Value	0.1
Screen Rulings	N/A
Trapping/Choking/Spread/Grip Values	0.05
Minimum Printable Dot %	1%
Maximum Printable Dot %	99%
Barcode min/max Magnification	min. X-Wide Dimension: 80%
Barcode Bar Width Reduction Value	-40µm (-50µm against direction of repeat)
Barcode Additional Quiet Zone	0.5mm each side
Surface/Reverse Printing	Surface - (Reverse - call to discuss)
Screen Angles	N/A
Maximum Eyemark Colours	N/A

Controlled colour viewing booths are used for colour approval.



YOUR TEAM



Happy to help....

The Sales Team

sales@opmgroup.co.uk
or call on: +44 (0) 113 231 1000



Need a Quote?

estimating@opmgroup.co.uk
call on: +44 (0) 113 237 8018



Our Customer Services Team will take your order...

customerservices@opmgroup.co.uk



The Design & Repro Team will fire your imagination

repro@opmgroup.co.uk



Need Technical help?

technicalteam@opmgroup.co.uk
or call on: +44 (0) 113 231 1000



QA Team

qateam@opmgroup.co.uk

