GRAPH-PAK

FOLDING CARTON ARTWORK

TECHNICAL REFERENCE

MECHANICAL SPECIFICATIONS

Trapping	Details
Customer artwork	Supply artwork untrapped. Graph-Pak will apply trapping during prepress.

Minimum line widths	Details
Positive lines	0.5 pt
Reversed lines	1 pt

Minimum type sizes	Details
Positive type	6 pt
Reversed type	8 pt

Total ink coverage (TAC)	Details
Combined CMYK total	300%

UPC / barcode specifications	Details
Min. magnification	80%
Ink / background	Single dark ink; light background.
Quiet zones	Preserve the required clear space.
Scaling / height	Do not stretch, crop or truncate.
Placement	Keep clear of cuts and folds.
Code / data	Verify product, SKU and encoded data.
Bar width reduction	0.001667 in.

Black support & overprint	Details
Small black type	100% K recommended.
Rich black fill	C40 M30 Y30 K100
White objects	Knock out; check Overprint Preview.

STRUCTURAL SPECIFICATIONS

Bleed	Details
Past knife cut, minimum	1/8 in. (0.125 in.)

Type safety	Details
From trims and folds	Min. 1/16 in.

Crease rollover	Details
Panel allowance	0.03125 in.

Glue & coating knockouts	Details
Glue areas	Keep free of ink and coating.

FILE PREPARATION & PROOFING

File formats	Details
Preferred	Native AI / INDD / PSD + all art.
Production PDF	Confirm settings with prepress.
Fonts	Permitted fonts or outlined text.

Artwork submission	Details
Package	ZIP the complete artwork folder and matching reference PDF.
Transfer	Online upload through our website.
Upload artwork	**www.graphpak.com/upload**

Contact information
(847) 451-7400 | Graph-Pak prepress
11250 Addison Avenue, Franklin Park, IL 60131

Color & proofing	Details
Color mode	CMYK; identify intended spot inks.
Copy / layout	Provide a matching reference PDF.
Color approval	Epson hard copy proof.
Spot-color target	Pantone reference or approved physical sample.
Ink drawdowns	Agree when needed for the job.
Print colors	As specified for the quoted job.

Image resolution & effects	Details
Photos at final size	300 ppi minimum.
1-bit line art	1,200 ppi minimum; vector preferred.
Raster effects	High (300 ppi) in Illustrator.
Press setup	Graph-Pak sets screening and profile.

Barcode artwork: Mark the location FPO and supply the barcode number. Graph-Pak will generate and place the barcode.

Graph-Pak typically identifies coating knockouts. Follow the current job dieline for geometry and marked finishing areas.

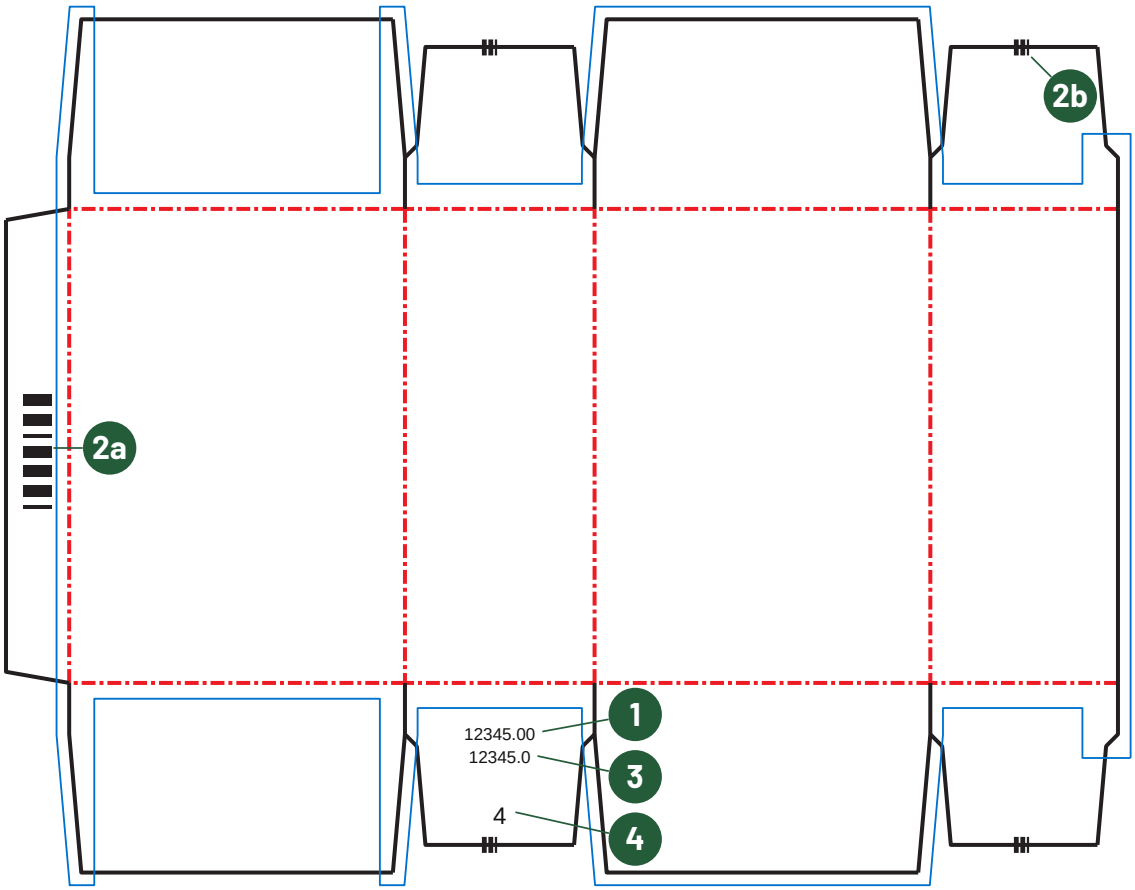
01 / DIELINE & MARKS

Dieline & production marks

Use the current Graph-Pak dieline at 100% scale and keep required production-mark areas clear.

SEAL-END CARTON / EXAMPLE

ILLUSTRATIVE ONLY / NOT TO SCALE



ENLARGED MARK DETAILS

Cut — Score / fold — Artwork bleed

1 Internal print item

12345.00 — 7 digit internal Graph-Pak code - Unique to 1 SKU

3 Internal job

12345.0 — Identifies the production job. The number after the decimal identifies the print form.

4 Die position

Identifies the carton's position on the cutting die.

2 Mix detection (2a / 2b)

2a — Barcode added to the glue flap during file preparation to help detect mixed cartons.

2b — Black tick marks may be placed on an internal panel to help identify mixed cartons during packing.

02 / ARTWORK SETUP

Artwork setup & clearances

Build to the current job dieline. Follow the specified bleed, copy clearances, glue areas and coating knockouts.

Bleed & copy clearance

Extend backgrounds and images at least **1/8" (0.125")** beyond knife cuts. Follow the dieline bleed path to allow for cutting variation.

Keep critical copy and logos at least **1/16" (0.0625")** from trims and folds. Follow larger job clearances, confirm art across folds and preserve barcode quiet zones.

Glue & coating areas

Keep all glue areas shown on Graph-Pak's dieline **free of ink and coating**.

Graph-Pak typically identifies coating-free areas, called **coating knockouts**. Let us know about any additional requirements, such as a date-code area.

Keep structure separate. Retain the dieline on its own named layer and spot separation. Preserve Graph-Pak's technical colors and settings.

Type & overprint

Minimum type size: **6 pt positive / 8 pt reversed**. Minimum line width: **0.5 pt positive / 1 pt reversed**. Review fine or light typefaces with prepress.

Use **100% K** for small black type and fine rules. Check white objects are not set to overprint, and review the file in Overprint Preview.

Supply fonts for the main file and support art where licensing permits. Keep an editable master when outlining type.

Barcodes & QR codes

You may mark the barcode location **FPO (for placement only)** and supply the barcode number. Graph-Pak will generate the barcode and place it in your artwork.

For supplied barcodes and QR codes, use vector artwork where possible. Favor **single-color black on a light background**, preserve quiet zones, and keep codes clear of folds. Do not stretch or crop codes.

Confirm code size, bar-width adjustment and placement with prepress. Check the barcode number, encoded data and QR destination against the intended product or SKU.

03 / COLOR & IMAGES

Color & image preparation

Prepare clear separations and sufficient image resolution. Include the source artwork and fonts needed for prepress review.

COLOR & SEPARATIONS

Define your color intent

Work in **CMYK** and convert RGB images before submission. Identify each color as a true spot ink or an intended process equivalent. Name spots consistently and remove unused swatches.

Supply a Pantone reference, approved sample or other target for critical brand colors. Confirm color profiles, total ink limits and large-area black builds with Graph-Pak for the selected board.

IMAGES & EFFECTS

Keep images sharp

Continuous-tone photos: **300 ppi minimum** at final placed size. For 1-bit bitmap line art, supply **1,200 ppi minimum**. Use vector artwork for logos, rules and line art whenever possible.

300 ppi at 200% = 150 ppi

Enlarging an image reduces its effective resolution. Check the placed size, not just the source file.

Set Illustrator Document Raster Effects Settings to **High (300 ppi)**. Keep layered source images and supply supporting artwork, even when embedded.

Leave trapping to us

Supply untrapped artwork. Graph-Pak applies traps to suit the press, inks and substrate for your job.

04 / HANDOFF

File submission & proof approval

Send the final native artwork, supporting assets and a matching reference PDF. Identify the item, SKU, revision and requested changes.

BEFORE YOU UPLOAD

- ☐ Native artwork plus all linked and supporting files
- ☐ Fonts supplied where permitted, or type outlined
- ☐ Current Graph-Pak dieline and correct panel orientation
- ☐ Reference PDF matching the submitted artwork
- ☐ Spot colors, finishes and additional coating-free requirements identified
- ☐ SKU, revision and a clear list of changes

PACKAGE & IDENTIFY

Use **File > Package** in Illustrator or InDesign to collect links and fonts that can be shared. For fonts managed through a font service, include the family and styles. ZIP the complete folder.

Use a clear filename that identifies the brand, item, SKU and revision. Remove superseded files from the final submission package.

EXAMPLE FILENAME

Brand_Item_SKU_Rev03_2026-10-21

PROOFING: REVIEW DIFFERENT THINGS AT EACH STAGE

Copy & layout

Provide a reference PDF that matches the native artwork. Before approval, review copy, panel orientation, graphics, barcode data and revision accuracy. Review opening features, perforations and tear-outs to ensure required copy remains visible and intact when the carton or display is set up or opened.

Color & finish

Use an **Epson hard copy proof** for color approval. Confirm finish approval requirements and any supporting samples or ink drawdowns with Graph-Pak for the job. A screen view or office printout does not establish the production color target.

Upload your artwork

www.graphpak.com/upload

Visit our website for file submission instructions, or contact your representative for help.

NEED HELP?

(847) 451-7400