



CROWN

Brand-Building Packaging™

GRAPHICS STUDIO
NORTH AMERICA

**CROWN GRAPHICS
DESIGN SPECIFICATIONS**

Crown Specifications Quick Guide

GENERAL INFORMATION

Contact

Contact your salesperson as your primary contact

Crown Graphics Studio North America

300 Brookside Ave, Building 23, Suite 150, Ambler PA, 19002

ART INFORMATION

Format

Adobe Illustrator 2018 or above / Include PDFs, fonts or outlined text & support files (layered PSD @ 300 dpi or above / 1-Bit Tiff @ 2400 dpi or above)

Maximum Printing Capability

6 Colors

Type of Plates

Photopolymer Steel Base

Trap

Reverse Trap (.3pt / .0042") to (.36pt / .005")

Minimum Dot / Maximum Dot

3% - 85%

Minimum Positive Type Sizes

San Serif = 6pt

Serif = 9pt

Minimum Positive Rule

.4pt

UPC INFORMATION

Magnification / Size

100% Non-Truncated (anything smaller will require a waiver letter)

Color of Human Readables

Recommended knock out aluminum can (if color, please choose darkest color)

Bar Width Adjustment

Silver Bars = Gain by .003"

Color Bars = Choke by .003"

OTHER INFORMATION

Transmitting Files

E-mail (Under 10mb) / CD / FTP (Please supply login information)

TIMELINE

Proofs

Up to 2 weeks or 10 business days from receipt of final art

Pilot

Up to 2 weeks or 10 business day from receipt of approved PDF

Production Cans

Contact your salesperson for current lead times

Printing Process

Aluminum Can

Ink Supplier

INX*

Color Sequence

Light to Dark

Standard Line Screen

85 lpi - 100 lpi

Dot Gain Minimum

15% - 25%

Minimum Reverse Type Sizes

San Serif = 7pt

Serif = 10pt

Minimum Reverse Rule

.5pt

Color of Bars

Recommended knock out aluminum can (if color, please choose darkest color)

Color of UPC Box

Recommended White (anything else will require a waiver letter)

Orientation

Please See Supplied Template

Color Matching

Please supply any previously printed material if you have a specific color-match.

ARTWORK SUBMISSION

Format

- Adobe Illustrator 2018 or above.
- Save and submit a PDF of the final file along with the layered Illustrator file.
- Provide all fonts or outline all fonts along with all the images that are used in the document.
(For more detailed instructions on text and images, view Image Resolution and Text & Rules below).

COLOR INFORMATION

Ink Type

Pantone® (Please supply PMS# with final artwork).

Maximum Printing Capabilities

6 Colors (White counts as 1 of 6 colors).

Color Opacity

- We offer transparent, semi-opaque and opaque inks.
- Transparent Inks will allow the reflectiveness of the can to shine through the color. Opaque Inks will block out most of the reflectiveness of the aluminum. Semi-opaque is a median choice.
- If the colors are printing as solid spot colors the inks may be matched to any desired opacity that will display a strong vibrant color print.
- If printing wet-on-wet screen process, the inks MUST be matched as semi-opaque, lighter warmer colors such as Yellow, Orange, and Red should be matched just slightly more opaque.
- All pastel looking colors should be matched as Opaque only in order to obtain the best, cleanest hue. Pastel colors cannot be used for wet-on-wet printing. The opacity of these inks will not maintain the screen dot density and will contaminate the printed can.
- Any existing cans or other printed packaging that the cans need to match in color should be supplied to Crown Graphics along with the artwork.
- If there is no existing packaging, PMS numbers need to be supplied when submitting the artwork. We can also provide color recommendations to the customer if needed. Please be advised that the PMS colors, which are printed on white paper stock in the Pantone books, will not necessarily match the ink of the same PMS number when printed on aluminum. This is where our recommendations on colors would be helpful to the customer in deciding which PMS numbers would reproduce closer on aluminum to what they are seeing in the Pantone book.

Ink Supplier

INX®



IMAGE RESOLUTION

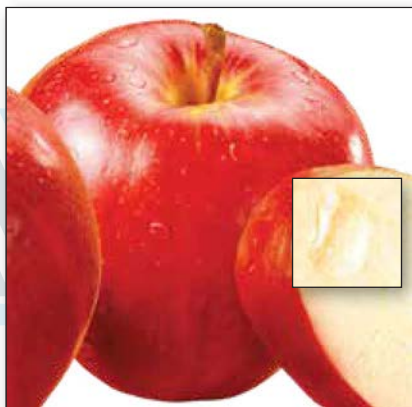
Illustrator File

Please make sure the DOCUMENT RASTER EFFECTS SETTING is set to 300dpi (this can be found in the EFFECTS tab in Illustrator)

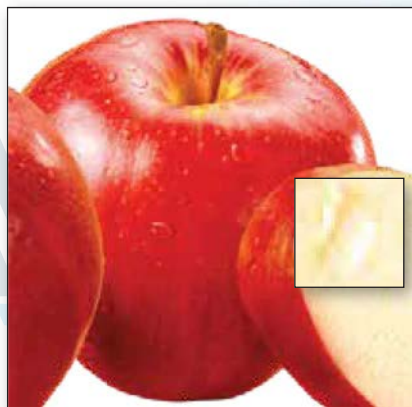
Photoshop Color or Black and White Images

- Images must be supplied at 300dpi (Note: Original images must be 300dpi or above, upsampling a low resolution image will not work.)
- Images should be supplied in Photoshop as a fully editable CMYK or Grayscale document. At Crown, we will separate the image to the correct PMS#s.

300dpi



72dpi



Photoshop Bitmap Images

Image must be supplied at 1200dpi or higher.

Ripped 1-Bit Tiffs

If you are supplying Crown with final ripped 1-Bit Tiffs, they need to be 2540dpi or higher.

TEXT & RULES

When printing aluminum cans on a high speed press there will be press gain (ink spread). To help keep all small elements and text open and readable, please follow the specifications below.

Minimum Positive Type Sizes

Sans Serif = 6pt

Serif = 9pt

Minimum Positive Rule

.4pt

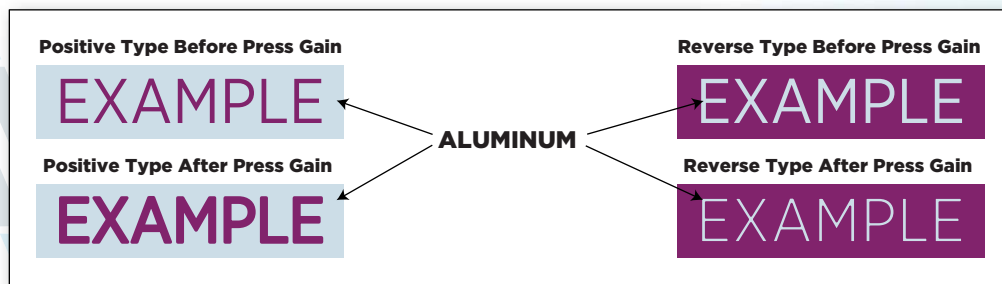
Minimum Reverse Type Sizes

Sans Serif = 7pt

Serif = 10pt

Minimum Reverse Rule

.5pt

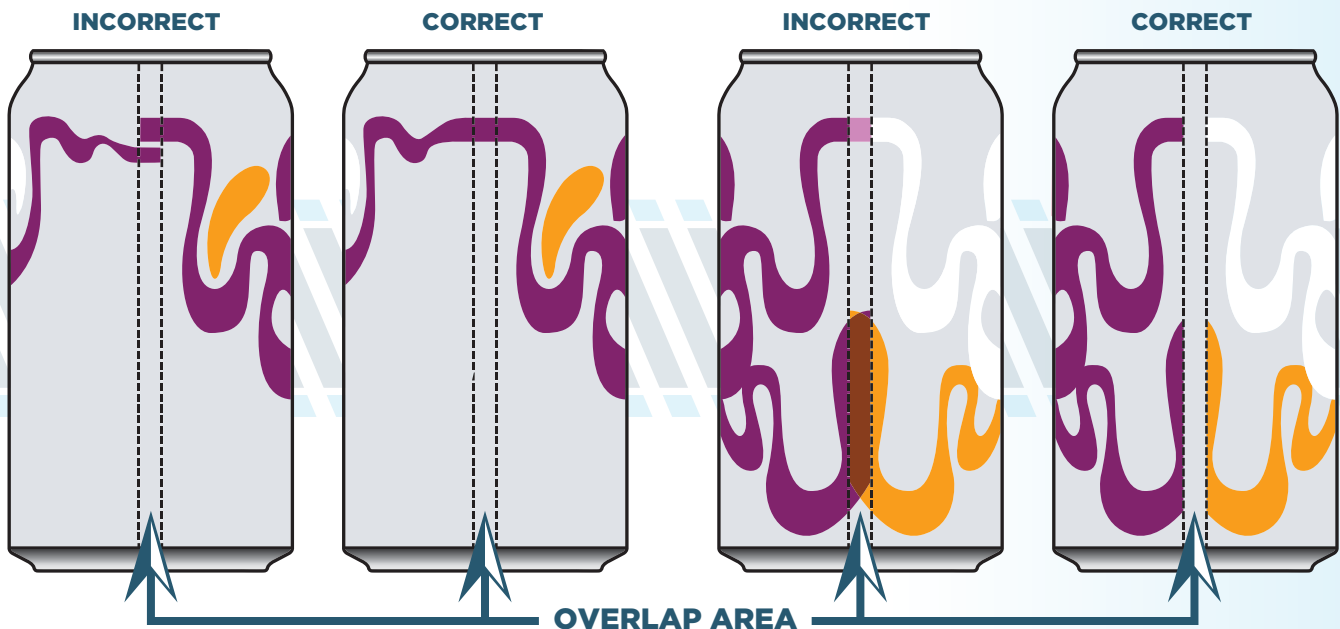


ARTWORK OVERLAP

Ensure that graphic elements from lead-end to trail-end meet and are aligned with each other. To avoid print contamination, ensure that only graphic elements of the same color overlap each where the artwork meets itself. If you have a halftone image, you can allow it to go into the overlap area. The overlap area is marked on each individual template with a cyan dash pattern.

If the same color will meet on both sides, it needs to be aligned in wrap area.

If different colors will meet on both sides, the colors need to be cut in wrap area.

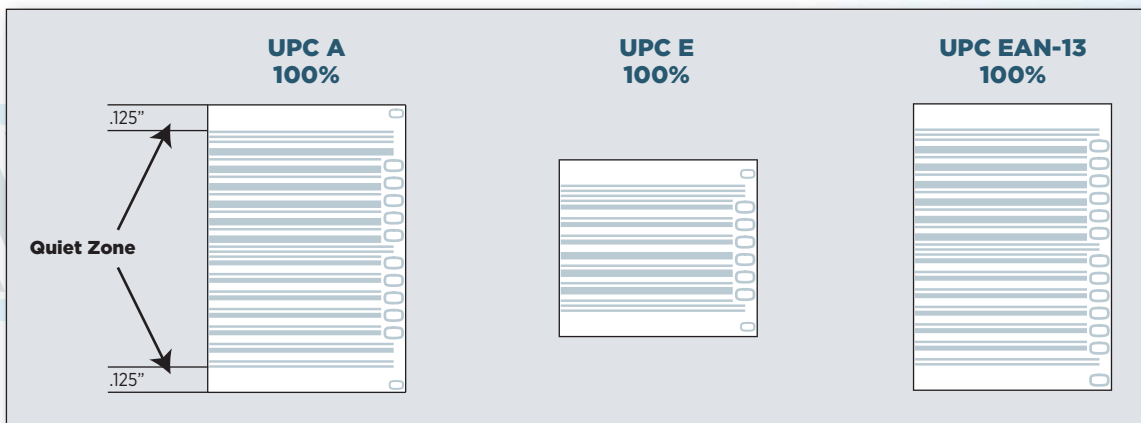


UPC BAR CODE PRINT REQUIREMENTS

- UPC symbol must be printed at 100% nominal size.
- Design must not truncate (shorten bar height)**.
- The code bars must go in the direction around the circumference of the can, as pictured below.
- On a white printed can the symbol must print with the UPC bars reversed out of a white background, with the aluminum showing through.
- On a white base coated can, the symbol must print as a positive image over the white coat. Best bar colors are black, blue and green.
(Please note that any base coated can is subject to our upcharge for base coating.)
- All UPC artwork will be ordered by Crown Graphics to ensure proper line width reduction.
- The UPC symbol must have a minimum 1/8" "quiet zone" to each side of the "guard bars."
(Do not print any copy element within the quiet zone; doing so would result in a scan failure.)

** Some customers do choose to use reduced bar codes. However, the Bar Code council and ANSI scanning requirements advises that the code bars should not be truncated (shortened) or reduced, but in full size. In the case of either truncated bars or reduced bars, the scanner will fail this one portion of the scan attributes. We are not stating that the code may not scan properly, but it will fail on the truncation or size portion of the reading. Due to the commercial challenges within the can print industry, we cannot warrant that something may not occur to affect a good pass grade. As a result, we are employing every opportunity to ensure we deliver the best scannable code to our valued customers. **

Any deviation from the requirements above or Crown recommended colors will require a signed waiver. This is now a common practice that we have implemented with all Beverage customers.



TACTILE & SPECIALTY INKS

Tactile and certain Specialty Inks can add a unique look and/or feel to your can making it pop off of the shelf. If you decide to use any of these inks, they cannot print in the neck, or at the very bottom of the can. You can find a layer called "Tactile Limits" on each individual template we supply. All Tactile or Specialty Inks must remain within these limits to ensure the best possible printability.

PILOT CAN

- All **NEW** designs require a Pilot (proof) can.
- The Pilot can serves the purpose of giving our plants a color accurate can to match during the first press run.
- After the Pilot can is produced, it will be sent to you (the customer) to sign off on before proceeding to the production can.
- The Pilot can may vary slightly from the final production can due to the difference in equipment and press speeds.

NLEA, TTB, & FDA LAWS

Please abide by all the NLEA, TTB, & FDA Laws when handling nutritional information or government warnings on your artwork. All work must be approved by NLEA, TTB, or FDA prior to final submission of artwork to Crown Graphics. Crown Cork & Seal Inc. is not responsible for obtaining any necessary government approvals nor are they liable for any deviation from the above laws.

FREQUENTLY ASKED QUESTIONS

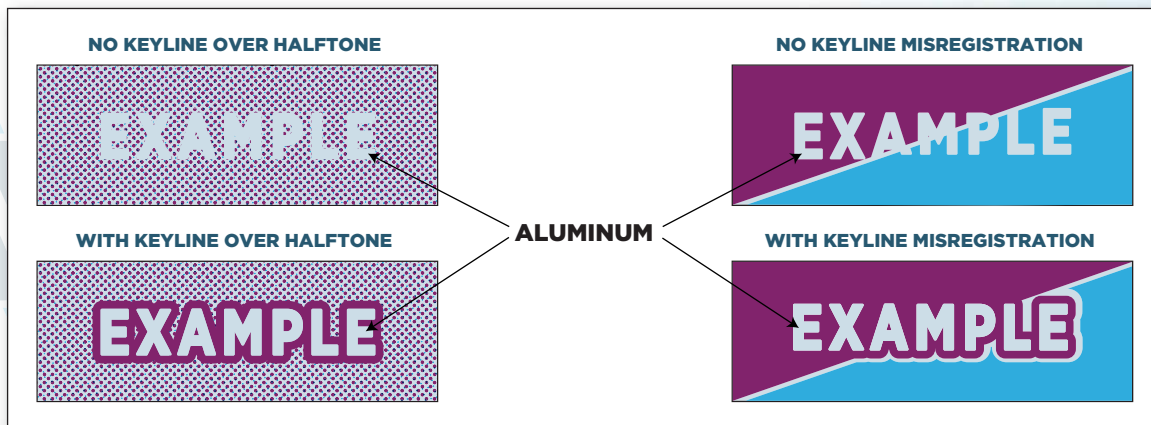
Why does the proof I received have silver lines around everything?

Crown needs to apply a (.3pt / .0042") REVERSE trap between all solid spot colors that meet. This is needed to eliminate contamination between different ink colors. These gaps between color will fill in during production and not be as noticable. Occasionally, to avoid registration concerns and improve visual appearance, we can leave the REVERSE trap out between two similar colors with the same opacity. This is done collectively with INX® to ensure that the ink tack between the two interacting colors will be adequate.



Why does the proof I received have keylines of color around text or elements?

- If small text or elements are on top of a screened image or pattern, they will be more legible by adding a solid keyline around them. This allows the screens to stop before they touch the edge of the text keeping it open for a cleaner print.
- If small text or elements span across two different solid colors we add a keyline to help with any misregistration.



Why do all the images and screens look lighter & washed out on my proof?

The reason all the screenwork is lighter then when the art was supplied to Crown is because we need to cut all of our screen work back by 10% to 20% to accomodate press gain. Even though the art looks light on screen it will get darker do to the press gain (ink spread). There are some circumstances that we need to cut back more or less then our standard 10% to 20%. Screen cutbacks are dependent on the design. The PDF is not a color-accurate proof — the Pilot cans will be your color-accurate proof.

Why is the PDF submitted low resolution or blurry?

Sometimes due to the size of the file, we need to save a low resolution PDF to submit back to the customer due to E-mail restrictions. This will not affect printing.

Why does the PDF submitted have vertical and/or horizontal lines in it? Why cant I see my images?

Sometimes due to the detail of the PDF they may not view properly. Try zooming in or out of the PDF and the lines should disappear. If your images are not showing properly when viewing or printing then try turning overprint preview on in Acrobat or on your printer when printing. If this does not resolve the issues, then by all means contact us.

What is the little retangular box on my artwork?

This is Crown's date code box. This has to be on the artwork so when Crown plants run the job they can add a code to it specifying detail that Crown internally needs. Please do not change the size of the box that is supplied in the customer templates.

What are the boxes on the top of my Pilot can?

These boxes are added for our pressmen to make sure they are running nominal print pressure. This is for internal quality at Crown. These boxes may cover up some elements on your design, but we ensure the production cans will match the PDF proof submitted and these marks will be removed.