



Graphics Specifications for Aluminum Cans

Direct Print (Wet on Wet) — Quick Reference

Printing Surface & Color

Surface: Shiny aluminum — highly reflective and visible through all colors. Account for metallic sheen when selecting colors.

Colors: Spot colors only (no process). Up to 8 spot colors. Avoid very light colors — difficult to match and hard to see. Color opacity dramatically affects contrast on aluminum.

Stayaway (Trapping)

Colors are applied wet-on-wet in a single pass, creating risk of contamination, press gain, and registration shift. We apply a **non-printing spot color stroke (stayaway)** to the edge of all objects.

Situation	Stayaway
Colors that touch	0.1 mm
Growth compensation (isolated colors)	0.05 mm
Reverse expansion / spread	0.076 mm
Halo behind reverse over screen	0.05 mm

Exceptions: No stayaway inside intentional wet-on-wet mixes. Reduce or omit stayaway on very small text, fine lines, and tight dither patterns where space does not permit.

Images, Screen Tints & Dither Patterns

Specification	Value
Minimum screen value	3% (values below 3% may wash off or fill)
Minimum in vignettes / blends	3% (prevents visible hard edges)
Maximum screen ruling	100 lpi
Recommended ruling (tints / blends)	85 lpi or lower
Preferred dither raster resolution	200 ppi or lower (pixels = 0.127 mm, leaves stayaway room)
Maximum dither raster resolution	300 ppi (pixels = 0.084 mm, no stayaway room)

Lighten tint values (below 100%) to compensate for dot gain. Higher dither resolutions risk filling in due to press gain.

Object Size & Text

Specification	Minimum
Object size / diameter	0.076 mm (objects smaller than this may break off plate)
Line and fill size	0.05 mm (larger preferred)
Preferred reverse size	0.254 mm or more (smaller may fill in)
Text size	6 pt minimum

Avoid fonts with thick/thin extremes at small sizes. Track out small text. Do not place small text over screen tints or fill text with a screen. Maintain minimum color thickness in letter fills and counters.



Template Zones

Zone	Description
Bleed area (outer box)	Preferred outer limit for artwork bleed. Add ≥ 3.175 mm bleed beyond window edge.
Litho limits / Window	Total visible area for graphics. Sides wrap around and meet on the finished can.
Copy limits / Shaded area	All text and UPC must stay within this boundary. Background color may extend beyond.
Overlap area	Where graphics from each side meet on the can. Cut images at overlap unless wet-on-wet.

UPC Specifications — Aluminum

Specification	Value
Preferred size	100%
Orientation	Rotated 90° — bars run vertically up the can
Location	Inside copy limits. Never in the neck area.
Min. background pad — Version A/EAN	28.45 mm \times 38.61 mm (1.12 \times 1.52 in)
Min. background pad — Version E	23.62 mm \times 27.94 mm (0.93 \times 1.10 in)
Minimum quiet zone	2.794 mm (0.11 in) — no other elements allowed
Maximum truncation	$\frac{1}{2}$ symbol length
Bar width adjustment — aluminum bars	0.089 mm (\approx .0035 in)
Bar width adjustment — colored bars	0.1524 mm (\approx .006 in) — inset bars before reducing
Preferred bar/background colors	Black bars on white pad —or— aluminum bars on white pad
Gap at guard bar (100%, with stayaway)	0.4191 mm (.0165 in) \pm 0.025 mm

Red scanner lasers cannot read red bars. Aluminum reads as black to scanners. Contrast between bars and background pad is what makes the code scannable.