Graphics Department Specs

A guide to help better understand the graphics requirements in the pre-press process and the requirements for the printing process.

Whitlam has a in-house graphic design team with a combined 40 years of experience in the pre-press and graphic design industry. They are highly skilled and educated to assist anyone with their design needs. If you would like to contact our graphics team please email them at **graphics@whitlam.com**

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TERMINOLOGY

Barcode: A pattern of vertical bars and spaces which represent characters of data that is readable with optical scanning devices.

Barcode Size: The size of the barcode is referring to the width of the whole barcode.

Barcode Verification: Tests the quality and readability of printed barcodes.

Bleed: An area where the printed image extends beyond the trim edge of the label in case of shifts while printing, this will ensure that the edge of the label has full coverage of ink instead of the material peeking through.

CMYK: Stands for Cyan, Magenta, Yellow, & Black (CMYK) and are used as inks in the printing process.

Color Matching: The process of transferring a particular color across different technologies or platforms. This may be difficult when the two different technologies use different color modeling tools. Color matching is important in desktop publishing and in printing out digital displays accurately.

Corner Marks: These are marks that help guide the die cutting process within .0347 of an inch when die cut.

Die Line/Trim: To cut regular/irregular shapes in paper or paperboard using a die.

Dots per Inch (DPI): a measure of output resolution in relationship to printers, imagesetters and monitors.

Extended Gamut: Allows for more accurate color when printing on a digital press, you can add 2 or 3 more colors of ink. These colors are Orange, Green, or Violet.

Font: A set of letters and numbers that have a particular size, weight, color, and style.

Ink Draw Down: A means of evaluating the color mixing of a printing ink by depositing a layer of the mixed ink on the surface of a substrate using a smooth-edged knife. Draw down is one of three basic tests used to determine the accuracy of color matching and mixing processes, the compatibility of the various inks combined, the performance of the ink on the substrate, and the drying characteristics of the ink. Draw down is also called pulldown.

Live/Safety Area: Is the area where logos, type, or important information will be safe from getting cut off in case of shifts while printing.

Pantone Colors: Color codes that stand for a specific shade. You can communicate about colors by defining the Pantone code. Basically, Pantone is the standard language for colors. The formula developed by Pantone can also be refereed to as a spot color.

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Pickup Art: Artwork used in a previous job to be incorporated into a current job.

Process Color: The colors used for four-color process (4CP) printing: yellow, magenta, cyan and black

Proof: A proof is a preliminary version of a printed piece. It provides a close representation of how the piece will appear when printed. Proofs are created to ensure that the client and printer are in complete agreement on the desired outcome before going to press. A **hard proof** (sometimes called a proof print or match print) is a printed simulation of your final output on a printing press. A hard proof is produced on an output device that's less expensive than a printing press.

> **Digital Proof** is a free digital version of your label that is print ready but digital proofs are not accurate for color, only for content.
> **EPSON Proof** has a cost associated with it and is a press-ready proof that is color and content accurate for Flexographic printing.
> **Press Proof:** also has a cost associated with it and is a press-ready proof that is color and content accurate for digital printing.

Quiet Zone: The white or empty area around the barcode that is required to ensure readability and decodability.

Raster Graphics: Raster graphics are bitmaps. A bitmap is a grid of individual pixels that collectively compose an image. Raster graphics are best used for **non-line art images**; specifically digitized photographs, scanned artwork or detailed graphics. These files aren't easily sizable or editable.

Registration: Is the method of correlating overlapping colors and the alignment of specific marks.

RGB: Stand for Red, Green & Blue (RGB). RGB is only used for web/computer design. RGB is not used in the printing process.

Tolerance: Tolerance represents the total amount of acceptable deviation. Print may slightly deviate from actual dimensions. Tighter tolerances require higher dimensional accuracy.

Trapping: Is a technique that is used to compensate for registration issues between colors while printing. It ensures no noticeable gaps or overlaps in the final printed label.

Spot Colors: A solid color used to print inks such as Pantone Colors or special mixed brand colors like Whitlam Blue.

Vector Graphics: Composed of true **geometric shapes and lines**. These files are more versatile, flexible and easy to use. These files are easily editable and sizable.

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FILE FORMATS AND HOW TO SUBMIT FILES

Vector Format
We prefer Vector Format in order to ensure print quality is at its highest. This will allow us to edit the art and make it print ready. In order to make requested changes to artwork we will need a "Package" folder (Illustrator/InDesign) that includes the original artwork file, fonts that are used in the artwork, and any images that are used.

Raster Format
Some Raster Formats may be acceptable in some situations but need to be reviewed before being accepted. In order for us to review Raster Files they will need to be 100% size and 300 dpi minimum.

Note: To see the difference between Vector and Raster go to page 05

Acceptable File Types (** = preferred file type)

**Adobe Illustrator (.ai, .eps, .pdf)
Requirements:
- Include Fonts and/or Outline Fonts
- Include all images in file
- Make sure artwork is vector format

**Adobe Hi-Res PDF (.pdf)
Requirements:
- Include Fonts and/or Outline Fonts
- Include all images in file
- Make sure artwork is vector format

Adobe InDesign (.indd, .pdf)
Requirements:
- Include Fonts
- Include all images in file
- Make sure artwork is vector format

Adobe Photoshop (.psd, .pdf, .eps)
Requirements:
- Include Fonts
- Keep Layers - DO NOT MERGE/FLATTEN
- No less the 300 dpi

Other File Types
JPEG or TIFF files may or may not be accepted by Whitlam due to quality of file. These will require Whitlam to review.

Submitting/Sending Art Files
Artwork files can be submitted in the following ways:
- Email
- CD, DVD, or USB
- Drop box, One Drive, or any other file sharing platforms

Files should be submitted to one of your Sales Contacts at Whitlam Group

If you don't have an art file, contact Whitlam today and we can create your artwork for you!
(See Page 9)

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REQUIREMENTS FOR SUPPLIED ART FILE

For best results please follow our requirements. If you do not follow our requirements then we may adjust your art to meet our requirements to ensure high quality of print.

FONTS:
All fonts in the art files should be supplied to us and/or outlined within the art file. Note that some Apple Fonts can't be transmitted to PC. These fonts must be outlined and cannot be edited by Whitlam. Serif, and some script fonts are not recommended with the printing process, especially with reverse/negative type.

Example of Font Types: San Serif Fonts   **Serif Fonts**   *Script fonts*

Minimum Point Size for Type:
• Positive Type (Black Type on White Background): 4pt.

Welcome to Whitlam Group. ⟶ 12 pt font (Normal Reading Size)
Welcome to Whitlam Group. ⟶ 10 pt font
Welcome to Whitlam Group. ⟶ 8 pt font
Welcome to Whitlam Group. ⟶ 6 pt font
Welcome to Whitlam Group. ⟶ 4 pt font (Minimum Point Size for Type)

• Reverse/Negative Type: (White Type on Black Background): 5.5pt BOLD

Welcome to Whitlam Group ⟶ **5.5 pt BOLD (Minimum Point Size for Type**

Minimum Line Thickness of Type:
• Positive Type (Black Type on White Background): .007 inches thick
• Reverse/Negative Type: (White Type on Black Background): .012 inches thick.
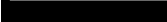
Line thickness of type ⟶ **E**

Micro-type:
If you are interested in adding smaller type, Whitlam has the capability of adding security features that include micro-type. Please contact us for more information on micro-type.

Line Requirements

In order to ensure the best quality of print, Whitlam's line requirement is .007″. This means that anything below this size may not print on a label. Strokes/borders around label edge must be .0625″ thick inside die/trim line to ensure that stroke/border wont get cut off.

Line Sizes:

| Reverse/Negative	Positive	
		0.01388″ = 1 Pt.
		0.02777″ = 2 Pt.
		0.04166″ = 3 Pt.
		0.05555″ = 4 Pt.
		0.06944″ = 5 Pt.
		0.08333″ = 6 Pt.

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RASTER GRAPHICS

Raster graphics are bitmaps. They are fine for things like images. But when it comes to the graphics it is not the best quality to use. When you zoom into a raster graphic you can see the pixels which makes raster graphics less clean and clear as vector graphics. With raster graphics when you increase the size of the graphic the quality of the image decreases. As you can see here it is fuzzy and when you zoom in or enlarge the graphic it gets even worse. If you have to use raster graphics in your artwork it is best to make sure the graphic are high-resolution with at least 300 dpi.

VECTOR GRAPHICS

Vector graphics consists of lines. These graphics are clean, clear, and crisp. Vector graphics are always the preferred way to supply graphics. It ensures that your graphics will be as clean and clear as possible with little to no fuzziness that you see with raster graphics. No matter how much you scale or zoom into a vector graphic it always stays the same, a clean line with no fuzziness. To ensure that your labels are clear, legible, and visually appealing it is best to design your labels using vector graphics.

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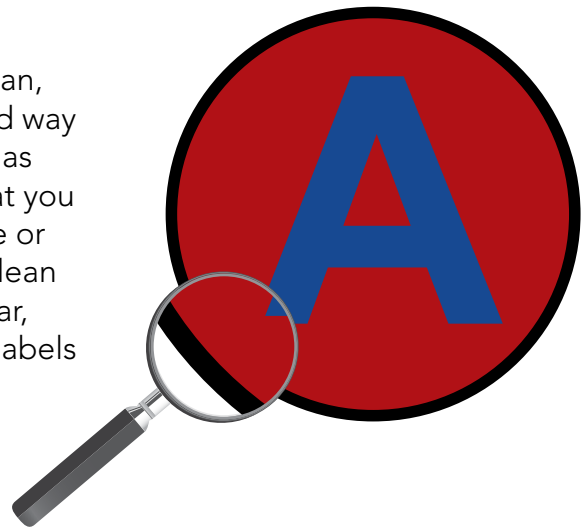
BARCODE REQUIREMENTS

Barcode Requirements

Whitlam will print any type of barcode and verify that barcodes will scan with a passing grade. Here are Whitlam's barcode specs for the most common barcodes.

Barcode	Example	Type	Character Set	Size	Quiet Zone
UPC Barcode		Linear	Numbers Only	No smaller than 65% of original size.	0.25" min.
Code 39		Linear	Numbers, uppercase letters, spaces, special characters	Variable	0.25" min.
Code 128		Linear	Numbers, uppercase letters, spaces, special characters	Variable	0.25" min.
Datamatrix		2D	Numbers, letters, spaces, special characters	No less than 5mm	3x cell size
QR Code		2D	Numbers, letters, spaces, special characters	Typically no less than 5mm but it depends on how much information is within code.	3x cell size

**BLUE AREA REPRESENTS QUIET ZONES

QUIET ZONE

Human Readable

QUIET ZONE

1 Cell

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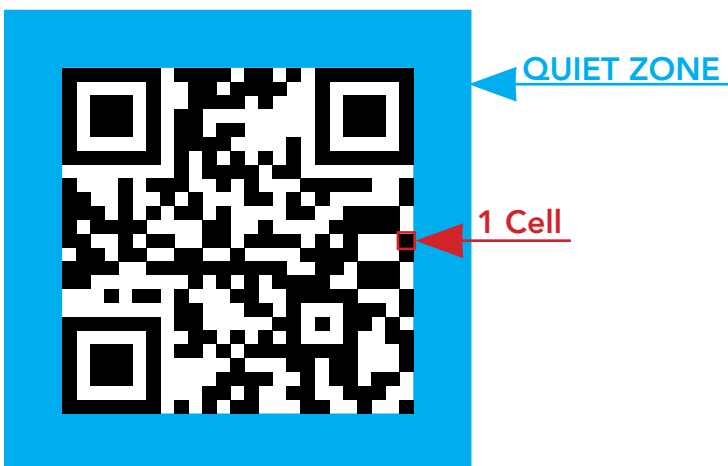
Die Line/Trim:
The exact shape of the label
or where it will be cut.

Bleed:
0.0625" outside of trim.

Live/Safety:
0.0625" inside of trim.

Hecho en casa

RED HOT
SALSA

Ingridents: Tomotato,
Chili Pepper, Coriander,
Jalapeno, Onion Garlic
and Lime.

P123456789

WE REQUIRE 0.0625 INCHES OF AREA WITH NO TEXT INSIDE AND A 0.0625 INCHES OF BLEED OUTSIDE DIE CUT/TRIM LINE. THIS WILL ENSURE THAT NOTHING WILL GET CUT OFF AND THERE WILL BE NO MATERIAL SHOWING WHEN LABELS ARE DIE CUT.

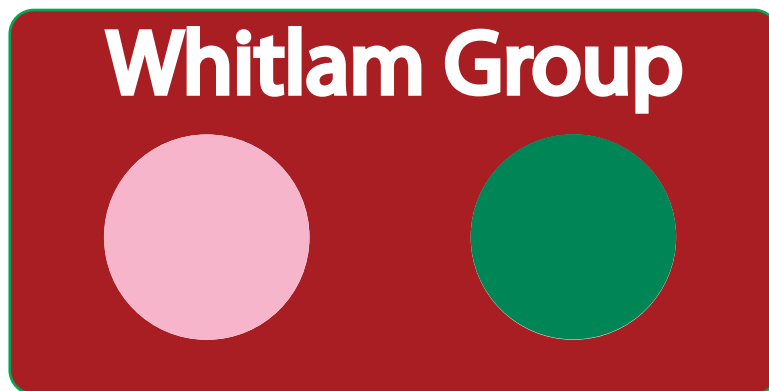WHITLAM GROUP

MAKING ART PRINT READY (TRAPPING)

Trapping for Flexographic Printing Process

Printing using the Flexographic process means we use what we call "plates" to print each color. Each color gets its own plate and each plate makes an impression on the label material one after another. So essentially the colors are being laid on top of one another. This means that trapping needs to be added to the artwork to compensate for the possible movement of the plates.

Trapping is like an added stroke around objects within the artwork. This "stroke" is an overlap of the two colors that meet at the point of the object. In this example the pink and red meet where the pink circle is. In order to ensure that the material of the label doesn't peek through if the pink or red plate shifts slightly we add a "stroke" around the pink circle. This stroke contains both the red and pink color. This ensures if one of the plates shift during the printing process then the material wont show through so you wont notice the small shift.

**WE ADD 0.007 INCHES OF TRAP AROUND OBJECT

What trapping looks like:

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Shift in printing with no trapping

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No trapping
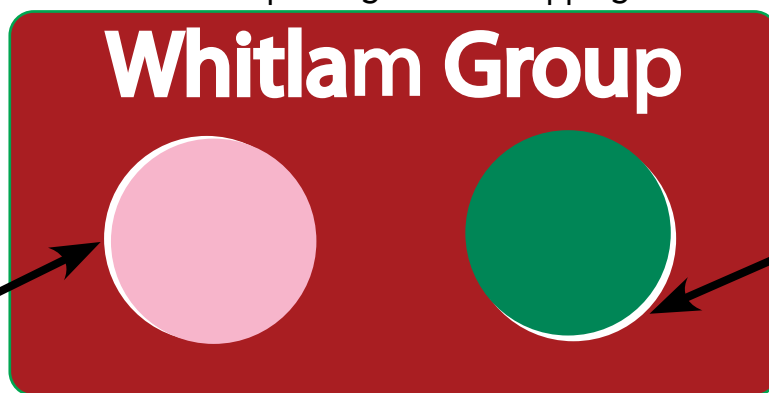
No trapping

Shift in printing with trapping:

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Trapping

Trapping

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TYPES OF GRAPHIC SOLUTIONS WE OFFER

Whitlam Group has their own in-house graphic design team. Our dedicated experts in our graphics department can help you with your graphic needs. Here are some of the graphic design solutions we can offer you.

Design Changes:

1. **Translations:** We can typeset foreign languages. Any language we cannot typeset we can get typeset and translated.

2. **Type:** We can typeset labels and make type changes to current labels.

3. **Graphic Changes:** We can make a wide range of different types of changes to current or new labels.

4. **Proofs:** We offer digital proofs, EPSON proofs, and press proofs.

5. **Variable Data:** We can do variable numbers, barcodes, and images on labels.

6. **Create art from blueprint:** If you have a blueprint but no artwork we can create artwork to match the blueprint. This includes all specs, call outs, and dimensions.

7. **Redesign/Recreate:** If you don't have artwork but have a sample of your label we can re-design your label for you and try to match the sample as close as we can. We may not be able to match pictures within the artwork. If you are unhappy with your current label we can create a new design for your label.

8. **Edit art to make print ready:** Whitlam will edit your artwork to ensure that everything is print ready. This involves trapping and checking your artwork to our specs. If your artwork does not have trap we will add trap to your art. If your artwork is out of our specs we may edit your art to meet our specs.

9. **Consultation:** If you are looking for advice on your label/brand, we can offer advice on what will help your label stand out or ways you can make your label better/more appealing.

10. **Design:** Whitlam Group can meet any of your design needs. We don't just do label design but can also do packaging designs, logos, sleeve designs, pouch designs and much more. See page 9 for more info on having whitlam create designs for you.

Color:

When creating your artwork it is best to use spot colors from the Pantone Book or a CYMK make up of your own colors. RGB is not used in the printing process, it is mainly used for computers so we do not accept artwork in RGB. If you have a sample, or specific brand color that you would like us to match color please let us know.

Our Flexographic presses print using spot colors, CMYK, or a combination of both.
On our digital press we print CMYK and can offer extended gamut.

If you would like more information regarding color please contact us.

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HAVE WHITLAM DESIGN YOUR LABEL

Whitlam Group has their own in-house graphic design team. Our dedicated experts in our graphics department can help you with your graphic needs. Whitlam Group's Graphic Designers can design your label for you, re-design a label you already have, or make changes to your existing label.

If you need artwork your sales rep will get you in touch with one of our graphic designers. Here are some of the questions that we may ask you before getting started on your design.

1. What is the name of your company? What is your product's name?

2. How do you describe your company and what do they stand for (in other words what is your company's objective statement)?

3. Do you have a logo? If not, would you like us to design a logo for you?

4. What product are you trying to sell?

5. Do you have some colors in mind that you would like to use on your label? Do you have a sample you would like us to match color to? Do you have any specific brand colors that we need to match?

6. What size would you like your label?

7. Are there any particular fonts that you would like to be used in your logo?

8. Do you have other labels that you would like your new label to match or be similar to?

9. Is there any specific look/type of artwork that you really like, and you would like yours to have a similar design/feel?

10. Do you have a sketch or idea of what you want your label to look like already?

11. Do you have nutritional facts and ingredient list that need to be on your label?

12. Who are your main competitors?

13. Do you have any documents of wording or verbiage you want on your label? How about pictures?

14. What material would you like your label to go on? White, Foil, Clear?

15. Do you have a barcode you would like to include on your label?

16. Do you want any security features added to your label to ensure brand security?

If you have any questions or would like more information regarding anything to do with artwork or designing labels please contact us today!

graphics@whitlam.com

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