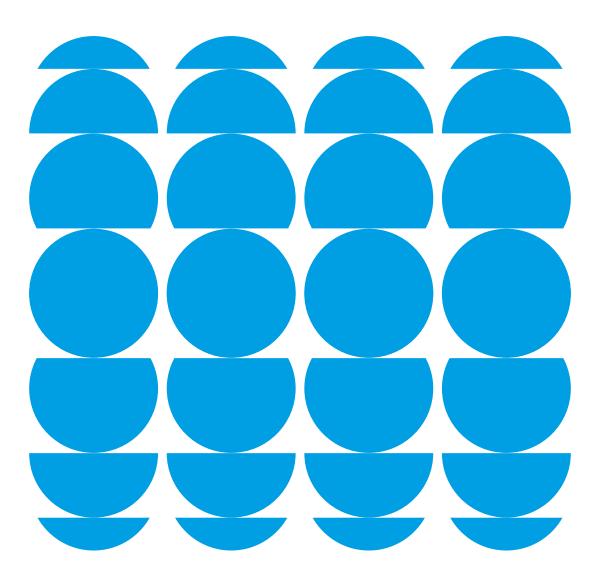


Label Guide Your guide to all things labels

e) rapid labels.





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rapid labels.

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Introduction

We make all kinds of labels and we understand their importance in your marketing strategy.

Rapid is at the forefront of innovation and we're always keen to push the boundaries, but there are some limitations.

This guide highlights the important decisions that should be considered when designing and ordering labels.

Labels and the terminology may seem like a different language to you, and if the following information raises more questions than answers, please feel free to contact one of our knowledgeable Hub Team members or Sales

Where/how will your label be used?

The answer to this question determines the:

- Size
- Shape
- Paper stock, liner and adhesive
- Orientation, winding/roll direction and application of your label

These are the first, most important decisions that should be made when thinking of using a label on your product, followed closely by the design and embellishments.















Label Size

Bottle shapes and other forms of packaging determine the size of your label.

With bottles specifically, there is an area on the bottle called the 'label panel'. This panel size determines how large your label can be. We recommend requesting this information from your packaging supplier prior to design.



Large (wrap) labels may create issues:

- There may be application problems when machine or hand applying large labels
- Large labels on glass bottles in particular, magnify the imperfections that may occur in glass bottles, possibly resulting in wrinkling, bubbling and tenting of the label

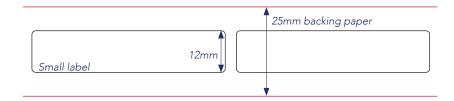
Smaller labels are recommended:

- A size that fits comfortably within the specific label panel size of different shape bottles/packaging
- However, very small labels (eg. much shorter in height vs width) may have different requirements for machine applications For example, they may require a larger backing carrier/liner for machine application

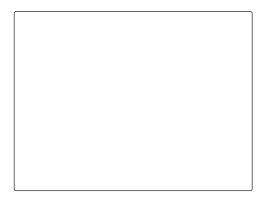
Most bottling companies require a minimum of 25mm backing.

More specific information about the label panel and machine application requirements can be sourced from you packaging supplier.

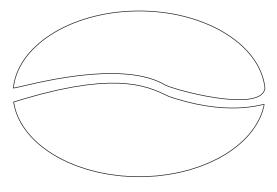








Rectangle



Special shape label

Label Shape

Most labels are shaped as a rectangle, square or circle.

However, in an effort to help your label stand out from the rest you may consider using a different shape:

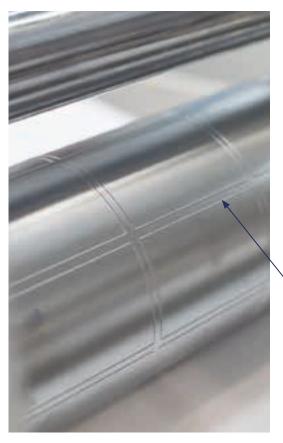
- Perhaps one with jagged or slanted edges
- Multiple parts to your label
- Or cut outs that will be removed from the label upon final application

These options are possible, but they do come with possible risks:

• Application issues: Hand applying – if you're hand applying labels, special shapes will be trickier to apply by hand

Machine applying – if your labels will be applied by a label application machine, we recommend performing a blank label trial to ensure the labels will apply correctly

• Wrinkling / lifting: This issue may be increased with special shape labels



Die / Die-knife

Die / Die-knife

The label shape is cut out with a tool called a 'die' or 'die-knife'. We use rotary flexible dies which means the die wraps around a magnetic cylinder in the press and it is flexible enough to do this.

The knife is raised higher than the base or floor of the die as shown in the

Cuts the label shape





Images (top to bottom): Kantac Mirrorkote; Clear on clear, Synthetic Stock

Stock (Face-stock Paper), Liner (Backing Paper) and Adhesive

The stock, adhesive and liner you choose to use for your labels is an important decision to make. All three of these go hand in hand and should be considered together when planning your labels.

Stock:

- The paper/stock that you choose to use for your label plays an important part in the design as well as the technical aspect of your label
- There are multiple different stocks, each creating a different look and feel to your label



Coated stock

Kantac Mirrorkote – The majority of our labels are produced on a Japanese gloss cast coated paper, which is then varnish-treated for protection & effect. Kantac Mirrorkote paper has the best performance for moisture protection and anti-scuffing. It has a repositionable-adhesive and glassine liner

Supergloss Cast Coated – This stock has the same face stock as Kantac, but has a permanent adhesive on a PET liner

Clear on Clear Synthetic stock

Clear labels with clear liners which produce a 'no look label' effect.

Bottling plants have to manage static and rigidity issues during application. For wine labels, the bottlers recommend labels no larger than 75mm x 75mm.

If you're hand applying – clear labels are trickier as fingerprints will be clearly visible along with any bubbles if the label is not laid down smoothly.

But with a simple clean design, clear labels can look great on the bottle. Permanent adhesive with a PET liner.

Clear on Clear Sustainable stock

Totara – is a clear, glossy, eco-designed wood-based synthetic film that offers a renewable alternative to fossil-based film as it is produced from pulp production residues. It is a multi-purpose product that has identical performance to standard PP materials and the manufacture of this stock replaces traditional fossil-based virgin materials with renewable ones.





Stock (Face-stock Paper), Liner (Backing Paper) and Adhesive cont...

Uncoated stock

Uncoated/Textured stocks have open-weave fibres, are rigid and thicker than coated stocks, look spectacular on glass and are appealing to touch.

An unfortunate side effect of the open-weave fibres is that some of these may allow moisture to affect the integrity of the stock.

However, Rapid Labels have a number of uncoated stocks, and most have a master process included in them. Once combined with our exclusive Oilskin varnish, these stocks cobb test equivalent to a coated stock. They also all have permanent adhesive and are available on PET liners.

These stocks are: Alpine Valley (White) Alpine Tussock (Off-white) Ngauruhoe (Extra white) Motuihe (White)

We have a couple more which are thick, rigid, uncoated stocks. They are 100% cotton-based, with permanent adhesive and glassine liners.

These stocks are:

Takaka (creamy 100% cotton-based, thick textured stock) Mt Aspiring (white 100% cotton-based, thick textured stock)

As a result of the cotton base, we recommend these two stocks be used for non-refrigerated labels as the cotton base absorbs more moisture and does not allow for a master process to be applied.

The cotton base also means that there are variations between batches in colour and texture as this is a more natural product.

However these stocks are beautiful and when used in the correct application and design, have a very attractive shelf appeal.



Images (top to bottom): Close up of Takaka – 100% cotton based stock; Mt Aspiring and Takaka





Stock (Face-stock Paper), Liner (Backing Paper) and Adhesive cont...

Metallic Stock

Silver metallic stock is more readily available than gold metallic stock. Metallic stock can be tinted to look like different foil colours (a more cost effective option to foiling in certain label designs) and because most inks are transparent it makes them look metallised. If part of the label requires a 'white paper' look, this can be created by adding white ink under the colours.

Permanent adhesive with glassine or PET liners.

Specialty Stock

These stocks are ideal to be used for one off promotions or celebratory labels. There are a range of different stocks available – some of which are wood stock, felt and leather. Please get in touch with us to see the full range.

These are better utilised for short runs and we recommend working with us to ensure the end result is something that is achievable on the stock.

NB: Their speciality nature makes these stocks not as cost effective as others, and they also need to be ordered in from overseas so the lead times can be longer than usual.

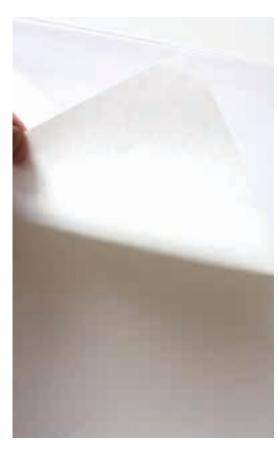
Block-out Stock

These stocks have a black layer between the stock and the adhesive. The face stock has more opacity to reduce show through, acting as a 'block out'. This stock is used for over-labelling, has a permanent adhesive and glassine liner.



Images (top to bottom): Metallic Silver Stock; Wood





Stock (Face-stock Paper), Liner (Backing Paper) and Adhesive cont...

Liner / Backing Paper:

• The liner, also referred to as backing paper is the substrate on which the face stock is adhered to. This is what carries the label through the printing press and acts as a release liner when going through an application machine. It is discarded once the labels have been applied to a product.

A smooth and glossy paper that is air, water and grease resistant. Usually off white, with a degree of opacity to it.

Rolls of Glassine liner rolls (post-application) can also be stored and picked up for delivery to a depot for downstream recycling. Speak to us about our Liner Recycling Solution.

Polyester PET Liners

PET liners are a synthetic liner which is transparent. It is a stronger liner, with fewer web breaks when running through the printing press and application machines. PET liners also allow for a more prominent emboss as the liner is stronger than glassine.

rPET Liners

rPET liners are produced with a portion of post-consumer waste content (PCW). By using PCW, these liners help to reduce the amount of virgin resources used and often help to divert materials from landfill.

They are transparent and perform the same as polyester PET liners.



Images (top to bottom): Glassine Liner; PET Liner

Adhesive:

- Adhesive is a layer of 'glue' on the back side of the face stock.
- We use pressure sensitive adhesives which are self-stick adhesives that do not require solvents or heat to activate the adhesive.

The adhesive types we use are as follows:

Repositionable

As the name implies, this adhesive is designed for short-term removability, allowing the label to be repositioned or reapplied.

Permanent

This adhesive is designed for applications that require a stronger bond with the packaging the labels are adhered to. The permanent nature of this adhesive makes it more difficult to remove and the label or packaging can be damaged when trying to remove the label.

This type of adhesive is often used when labels need to be removed without damaging the label or the surface it is applied on. Temperature can affect the stickiness and removable capabilities of the labels with this type of adhesive.





Environmental Objectives

Sustainable Solutions for Labels

Labels are an important part of a brand's product and Rapid Labels has developed a portfolio of stocks that are manufactured in an environmentally responsible manner and provide solutions to client's needs for sustainable label options.

Our Environmental Objectives Sustainable Solutions for Labels include label materials produced from recycled and renewable materials, as well as a range of materials that are compostable and biodegradable.

Rapid Labels is also FSC® COC certified. This means that we gained the Forestry Stewardship Council Chain of Custody Certification. We can pass on the qualifications of FSC® certified product (paper) from our supplier to

If you choose to use FSC® certified paper for your labels, you are supporting a much larger cause and you can communicate your support on your label too! Include an on-product claim, using Rapid Labels' FSC® logo and licence code. Talk to us for more information about this process.

Rapid's 5 'R's to a Sustainable Future

We have created Rapid's 5 'R's to categorise our different sustainable label solutions. There are a number of materials that fall under each category. Talk to us to find the right material to work with your product. See Page 10 for more about each category.

Sustainability - The common definitions



Environmental Sustainability: Environmental systems are kept in balance while natural resources are consumed at a rate where they are able to replenish themselves.



Biodegradable: A product that can be broken down without oxygen, turning into carbon dioxide, water and biomass within a reasonable amount of time.



Responsible Sourcing: A voluntary commitment to take into account environmental, social and ethical behaviours when selecting and doing business with suppliers.



Compostable: Products capable of disintegrating into natural elements in a compost environment, leaving no toxicity in the soil.



Post Consumer Waste: Waste that's been used, disposed of and diverted from landfill - eg. aluminium cans and newspapers.



Circular Economy: A regenerative system in which resource input and waste, emission and energy leakage are minimised by slowing, closing and narrowing energy and material loops.



Recycle: Converting waste into a reusable material.



Sustainable Development: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." – Brundtland Commission





Rapid Labels' Sustainable Solutions - Labels

Rapid's 5 'R's to a Sustainable Future



Responsibly Sourced: Choosing materials sourced responsibly to ensure sustainable use of resources.

Rapid Labels is able to offer a wide selection of FSC® certified paper stocks and glassine liners. Our FSC®, Chain of Custody (COC) certification allows us to promote responsible forest management, and pass on the qualifications of FSC® certified papers from our supplier to our clients.



Our material range also includes a number of materials manufactured from responsibly sourced alternatives to wood fibre including, cotton, rocks, grass, and waste streams from grape crops and the paper manufacturing process.

Rapid's approach to sustainability including our commitment to ISO 14001 Environmental Management ensures you are using a responsible sourced print partner.



Recycled Content: Conserve resources by reusing what we have already used.

Rapid Labels offers a variety of paper and synthetic materials that include recycled Post-Consumer Waste (PCW). Using materials with a portion of PCW reduces the amount of virgin resources used and often helps divert materials from landfill. The use of PCW is also available for Glassine and PET liners.



Reduced: Conserve limited natural resources by using less of them.

Choosing materials that use comparably less raw materials conserve the limited natural resources used in their manufacture. Often referred to as down gauging, using thinner facestocks and liners provides more labels per roll reducing the environmental impact in transportation storage and label application.



Re-purposed materials: Giving materials or waste streams a second life.

Rapid Labels' sustainable solutions include material options where the substrate is manufactured from re-purposed materials such as reclaimed burlap coffee bean bags or cotton.

Re-purposed materials are also created from the waste streams of other manufacturing process. These include facestocks manufactured from rock mining waste, and crop waste from grape, citrus, sugar cane, grass and a wood-based Polypropylene film material.



Recycling Enabled: Making your product recyclable.

Rapid Labels is able to offer a suite of materials which, when paired with the correct packaging and recycling infrastructure, makes your packaging recyclable.

These recycling enabled materials are designed to allow clean separation during the recycling process to improve recycling yields and they are at the foundation of our drive towards a circular economy.

Biodegradable and compostable materials with facestocks and adhesives compatible with industrial composting standards are also part of Rapid's Recycling Enabled materials.

The team at Rapid are knowledgeable on ensuring the correct match of label material to your packaging material. Talk to us about Glassine Liner Recycling too.

For more information about Rapid Labels' Environmental Objectives, contact us: 0800 865 223 or thehub@rapidlabels.nz



Rapid Labels' Sustainable Solutions - Glassine Liners

Included under our Rapid Labels' Environmental Objectives project is our Sustainable Solutions for Liner Waste. We offer a Liner Recycling service through one of our paper suppliers.

Rapid Labels' Liner Recycling Service

Contributing to a sustainable future.



Sign up for our Liner Recycling service when you order your labels



Rapid Labels prints and supplies your labels to you





We collect your box once it is full; contact us to arrange a pick up



Following our Recycling Rules, you begin storing the liner waste



We send you Rapid's Liner Recycling box and pallet



Rapid sends an invoice with confirmed freight and handling fees before sending a replacement box and pallet,



Liner is shipped to our Liner Recycling Partner



Liner is recycled in India and it is used to make high quality tissue paper

For more information about our Liner Recycling Service, contact us: 0800 865 223 or thehub@rapidlabels.nz





ROLL DIRECTION



ROLL DIRECTION #2



ROLL DIRECTION #3



ROLL DIRECTION #4



ROLL DIRECTION #5



ROLL DIRECTION #6



ROLL DIRECTION #7



ROLL DIRECTION #8





Images (top to bottom): Roll / Winding Directions; Front and back labels alternating on roll

Orientation, winding/roll direction & application

The orientation of your label design should suit the 'label area' on which the label will be adhered to.

If the labels are machine applied, we need to know this to determine the winding/roll direction required for the label application.

The winding or roll direction of labels is the orientation of which the labels are required to be on the roll once delivered to the label application company. This ensures that the labels are applied correctly onto your product.

There are 8 different 'copy positions' as shown below:

Outside wound

- Roll Direction 1 Top edge leading: the top edge of the label comes off the roll first
- Roll Direction 2 Bottom edge leading: the bottom edge of the label comes off the roll first
- Roll Direction 3 Right edge leading: the right edge of the label comes off the roll first
- Roll Direction 4 Left edge leading: the left edge of the label comes off the roll first

Inside wound

- Roll Direction 5 Top edge leading: the top edge of the label comes
- Roll Direction 6 Bottom edge leading: the bottom edge of the label comes off the roll first
- Roll Direction 7 Right edge leading: the right edge of the label comes off the roll first
- Roll Direction 8 Left edge leading: the left edge of the label comes off the roll first

Alternating labels

If your product requires front and back labels, the labels are usually supplied on separate rolls.

Occasionally though, the company who applies the labels may require the front and back to 'alternate' on the same roll.

This should be confirmed with your label applicator and that information passed on to Rapid Labels when you place your order.





Cores

These are a cylindrical cardboard which acts as the middle structure to a roll of labels (like the middle of a toilet roll).

This is the device that fits onto the unwind part of a label application machine.

Different machines require different size cores. Please confirm with your application company which they require and advise us when requesting a quote.

The standard sizes are as follows:

76mm core 42mm core

38mm core 25mm core 19mm core

Images (top to bottom): Core; The core supports the labels and liner whilst they are in their printing and application stage









Images (top to bottom): Close up of CMYK dots; Solid

Label Design

When designing your labels, we're more than happy to take a look at concepts and point you in the right direction with stock and embellishment recommendations. There are many different embellishment and varnish options for your label, but we'll list the most common ones below and explain what they are. If there's something a bit different you'd like to try, let us know and we'll see if we can make it work.

Colours

Labels can be designed using CMYK (4 colour process) or Pantone colours.

The image is created by Cyan, Magenta, Yellow and Black dots that print one after the other to make up the image.

The Pantone Colour Matching System (PMS) is largely a standardised colour reproduction system. By standardising the colours, different manufacturers in different locations can all refer to the Pantone system to make sure colours match without direct contact with one another. These colours are available for coated (C) and uncoated (U) stocks. It is important to refer to the correct Pantone book when choosing colours for a particular stock. Pantone colours on uncoated stocks are duller due to the stock absorbing more of the ink.

Digitally printed labels are printed CMYK and if there are Pantone colours required, we will match these as close as possible using CMYK and our special booster ink colours. However not all Pantone colours can be replicated by CMYK.

Flexo and Offset printing can include a combination of CMYK and Pantone colours or these processes can use each individually too.

For more information about Printing Processes please see that section in this document.

Specialty colours

We can 'match to sample' for colours that are not found in the Pantone Colour books. However, we match as close as possible to these samples because there is a degree of variation between different print processes and products.

If you require a colour match, please send a sample of the item, product or label to us at quoting stage. We require the physical item as photographs or scans may alter the actual colour.

Design vs colours vs printing

Once we see a design, we may recommend printing it in a way that'll work better than how your designer has set it up. We want to ensure we achieve the result you're after, so it's always a good idea to send through the finished artwork with your quote request. This will allow our Prepress team to examine the files and provide the correct information to our estimators and technical team.











Embellishments

There are a number of different embellishments that can be used on labels – and the list is always growing as we push ourselves to be innovative and offer you different options.

However, the following are the most common with a few of our specialty ones included too.

Foiling

There are a range of different foil colours that can be used - the most common being gold or silver foil - variations of these are available off the shelf, other colour foils may need to be ordered in. Check with us regarding what is readily available vs different colours.

Adding foil to your labels adds a bit of 'bling' and can be appealing to the end user.

There are two options when foiling on labels – Hot Foiling and Cold Foiling.

- Used on conventional presses only
- The foil is applied with adhesive using a flexo plate
- Used on coated stocks only
- A lower cost and we make the plates in-house so there is no delay
- There is a smaller range of foil colours available in cold foil
- The quality of fine line work is diminished due to the compression of the foil and glue, resulting in the fine line work 'gaining' in size

Hot Foil

- Used on conventional and digital presses
- The foil is applied using heat activation
- On conventional presses (flexo and offset), hot foil blocks are used on uncoated stocks specifically as cold foil is not an option for these
- On digital finishing presses, this option is the most commonly used on both coated and uncoated stocks as the end result is of a better print quality
- Our offset and digital presses also offer multiple foil colour options inline - which means that you can print two foil colours using one foil block
- We have a NZ based supplier who have a quicker turn around timeframe, but the ability to foil finer detail is more limited
- Most of the hot foil block suppliers we use are based overseas. Their foil blocks offer better quality print with cleaner edges and better detail
- However, because they are based overseas, the cost is higher and there is a time delay

For foil blocks from overseas, we allow for a minimum of 10 working days from when the foil block is ordered for delivery of the block to Rapid.

Images (top to bottom): Cold foil flexo plate; Locally supplied magnesium hot foil block – Digital; Overseas supplied hot foil block – Digital and Offset; Overseas supplied copper hot foiler – Flexo





Images (top to bottom): Cold foil on coated stock with our Sharkskin varnish over the top; Hot foil on uncoated stock

Embellishments cont...

Our recommendations around using foil are as follows:

Very large areas of foil: These can be troublesome – highlighting pinholes that may occur when printing, but to combat this we often print a colour under the foil

However, on uncoated stocks, because of the texture of the stock we do not recommend using very large areas of foil

- Very small areas of foil: Our recommendations are design dependent as many factors come into play. It would be best to send us the design to look at before finalising your label
- Hot foiling detail: Due to how these foil blocks are made, very small areas of detail may not result in a lot of detail. We recommend sending us a 100% size image to review when designing your label
- Cold foiled images/text tend to 'grow' on press. We do counteract this at our Prepress stage, however we do not recommend printing very small detail in cold foil
- Foiling off the edge of the label we recommend pulling foil in from the edge of the labels because this can often result in chipping once the labels are applied to packaging. We try to counteract this by adding a varnish over the foil, but it is not 100% bullet proof
- A combination of large and small areas of foil on the same foil block is not recommended. This is because the pressure required to print the larger areas will make the smaller areas of foil 'miss' when printing





Embellishments cont...

Embossing / Debossing

This effectively raises up (embossing) or pushes down (debossing) into the stock.

Most embossing techniques involve a 'male' plate/block and a 'female' plate/block. These lock together (with the stock between them) in the printing press and this results in embossing or debossing.

There are two emboss/deboss options we offer - Plate or block emboss/ deboss.



Plate emboss/deboss

- Uses a hard, plastic material to make the male and female plates
- These are made in-house and are more cost effective
- Used on our conventional and digital presses
- One height level is achievable due to the depth of the plate
- Results in a rounder edge



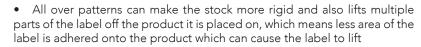
- Uses a moulded base and a moulded counter
- Used on our offset and digital presses
- Results in a cleaner/crisper edge
- Allows for different height embosses within the same block. To see examples of this, please ask to see our Flatbed Fundamentals booklet
- These are made by an overseas supplier so there is a higher cost involved and there is a time delay

We allow for a minimum of 10 working days from when the emboss block is ordered for delivery of the block to Rapid.



Our recommendations around using embossing/debossing are as follows:

- Embossing off the edge of the label is not recommended
- We advise having at least a 5mm gap between the edge of the label and the edge of the embossing. This is the industry standard. If embossing runs off the edge of the label it creates tunnels under which moisture can travel, compromising the adhesive and allowing the label to lift/tent



- Large areas of embossing lifts large areas of the stock off the product and can end up deflating or dipping in the middle
- Embossing/debossing also tends to flatten out over time, making it less obvious to the naked eye



Images (top to bottom): Emboss and deboss indentations visible on the under side of the backing paper; Male and Female embossing plates; Overseas supplied emboss block; Embossing over foiled area using emboss block





Embellishments cont...

Highbuild

This is a clear varnish that is printed onto labels using a screen mesh that carries enough varnish to create height to the varnish.

Highbuild acts as a raised area on designs, it keeps it's shape and does not flatten out over time (within our recommendations).

It is available in gloss or matt highbuild and can be applied to labels using a rotary screen (Flexo and Offset) or a flatbed screen (Digital).

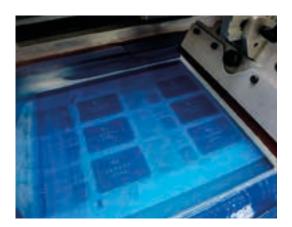


Rotary Screen Highbuild

- Available on Flexo and Offset presses
- Uses a mesh to fit specific print cylinder sizes
- Made in-house but they are a higher cost in comparison to flatbed screens due to the material

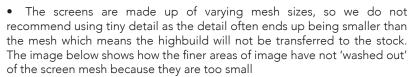
Flatbed Screen Highbuild

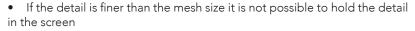
- Available on the Digital finishing machines
- A flat mesh screen
- The highbuild solution is squeegeed onto the labels, through the mesh
- Made in-house at a lower cost in comparison to rotary screens



Our recommendations around using highbuild are as follows:

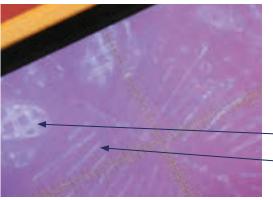
- Large areas of highbuild deflates in the middle. Highbuild works better for finer (within reason) areas of detail, but there is a minimum line size. Our recommendations are design dependent as many factors come into play. It would be best to send us the design to look at before finalising your label
- Highbuild should be brought in from the edge of the label; having a gap of at least 1-2mm between the label edge and beginning of the highbuild
- We do not recommend using large pattern areas of highbuild as this can make the stock very rigid and compromise the flexibility of the stock. It also can shrink over time which may result in pulling the label up off the product





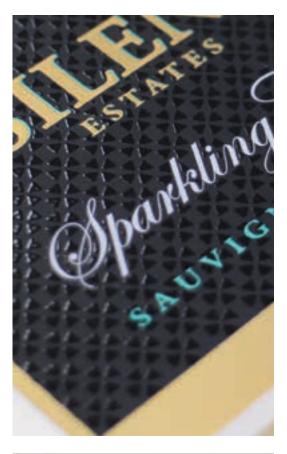
Mesh size

Fine detail



Images (top to bottom): Gloss Highbuild over ink;, Inside a rotary screen in the press; Flatbed Screen; Magnification of mesh vs fine lines of detail





SAUNIGN

Embellishments cont...

Varnishes

A varnish is used to protect the label, ink and/or foil. They can also be used as an embellishment on your label design.

There are a number of different varnishes we offer.

Gloss

Adding extra shine/gloss to your labels (all over the label).

Dulls down the label (all over the label).

Spot Gloss

An area of gloss on a label – used in conjunction with an all over matt varnish or other embellishments which will allow a contrasting base to the gloss varnish.

Spot Matt

An area of matt on a label - used in conjunction with an all over gloss varnish or other embellishments which will allow a contrasting base to the matt varnish.

An internal Rapid term referring to our special blended varnish which we use on coated wine stocks.

Sharkskin

A satin textured varnish exclusive to Rapid Labels.

Our premium moisture barrier to use with uncoated stocks.

Screen Varnish

This varnish uses the same tooling as highbuild but with a different mesh which does not lay down the height that highbuild mesh does.

It is a great way to create a higher gloss / matt contrast on your labels and allows for an all over pattern (unlike highbuild).

Screen varnish is also used on uncoated stocks when a glossier area is required on the label. Using a gloss varnish flexo plate does not create enough contrast.

Varnishes on clear stock: We advise using gloss varnish as it will not compromise the clarity of clear stock.

Matt / wine varnish will make clear stock appear 'cloudy'.

Images (top to bottom): Gloss Screen Varnish; Sharkskin Varnish





Specialty Embellishments

Micro-debossed foil

An image/logo can be micro-deboss etched into the foil block. It can be tailor made and adds a layer of security to your labels, making them a step harder to counterfeit.

Sculpted foil

A method of embossing and foiling at the same time – creates different levels of height. Only certain images/designs suit this option; please speak to us if you're interested in using this option.



Emboss/Foil combo

Similar to Sculpted foil but without the 'peak' in the middle. Once again, only certain images/designs suit this option; please speak to us if you're interested in this option.

Dual height highbuild

Using a combination of gloss and matt highbuild over each other, creating multiple levels to the highbuild area.



Glow in the dark ink

This feature works best over lighter areas. It's like a clear varnish that will activate in the dark. Available in blue or green when coloured up.

Invisible ink

As used on bank notes, this ink can be hidden on your label – visible with an ultraviolet light.



A clear coating that colours up under sunlight or ultraviolet lights.



A clear coating that colours up in cold temperatures.



A clear holographic finish which is available in different patterns.

Lustrecoat

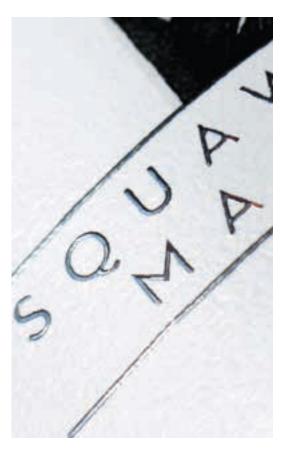
Adds a pearlescent shimmer in the form of a clear varnish.

Softfeel

An all over laminate that makes labels soft to the touch.

Images (top to bottom): Micro-debossed Foil; Sculpted Foil; Glow in the dark ink; Invisible ink





Specialty Embellishments cont...

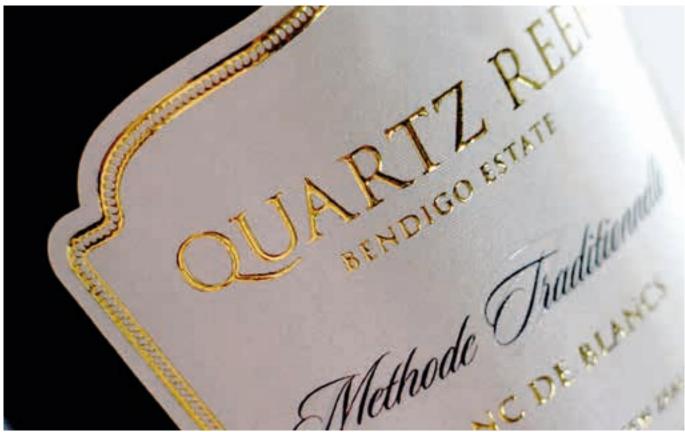
Exclusive in NZ to Rapid Labels

Floating Foil

Our award-winning embellishment. A technique that raises foil from underneath the foil material without the use of embossing.

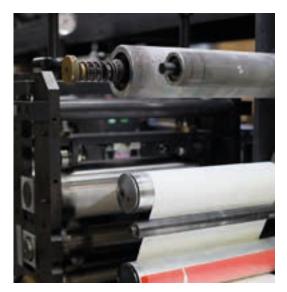
It's a favourite amongst our customers - a great way to add a point of difference to your label design. We're always ready for a challenge so send through your designs to allow us to work with you to achieve the correct

Note: This is an embellishment that should not run off the edge of the label.



Images (top to bottom): Silver floating foil; Gold floating foil





Printing Processes

At Rapid we have 3 print process to choose from:

Flexo, Offset and Digital.

This means, that we have a range of print options to suit your labels, from short to long run and anything in between.

We will recommend the best option for printing based on your label design. Certain designs work better down certain print lanes, along with the quantity you order.

Contact us if you'd like more information about each print process.



Regulations

In the packaging world, especially where food and drink are concerned, there are a number of regulations and information that are required on labels.

Different countries require different information and/warnings on labels so that the consumer if fully informed.

We recommend that you work with your distributors to stay on top of this ever-changing issue.



Images (top to bottom): Flexo Press, Offset Press, Digital Press



Japanese back labels



USA back labels









Moisture, condensation and labels

If moisture or condensation gets under the label, it makes the adhesive less effective, resulting in labels that bubble or tent, lift and distort.

Uncoated stocks tend to be more affected by moisture than coated stocks. This is because coated stocks are not as fibrous/textured as uncoated stocks. Coated stocks are less porous, but we still do protect them from moisture and scuffing with our varnishes.

Our main uncoated stocks have extra wet strength protection because of a master process that is included when the stocks are made, and once we apply our Oilskin varnish, the moisture protection is increased so much so. that these stocks cobb test at the equivalent to coated stocks.

However, using certain embellishments and packaging irregularities that can create issues when it comes to condensation and moisture under labels

Embossed labels

Heavily embossed labels, especially ones with patterns or embossing off the edge of the label may encounter issues with moisture.

Embossing off the edge of labels creates tunnels of raised areas under which moisture can travel and if there are any areas of the label that has not adhered to a bottle the moisture will pool here – resulting in a distortion in the label stock - bubbling / tenting.

Uneven areas onto which labels are applied

If the surface of a glass bottle is uneven, the label stock will not be able to conform to the uneven shapes – thus areas of the label will not adhere to glass that has low spots – which results in an area of un-adhered label. We have a couple of tests we perform on glass bottles to determine the evenness of bottle surfaces.

Steel Rule vs Bottle Test – Using the simple method of placing a steel rule vertically against the side of the label panel of the bottle in question, any imperfections in the bottles' label panel area will be visible as hallows. As shown.

Eccentricity Test- We perform Eccentricity Test on bottles to measure how flat / even label panels are. We can measure the eccentricity of bottles both vertically and horizontally around the bottles. If the panels are flawed with extremely high and low points, this prevents the labels from being applied correctly which creates bubbling / lifting of the labels.

Images (top to bottom): Tenting of label edges

- : View of back side of a label looking through the bottle. Heavy pattern emboss creates areas of the label that do not adhere to the bottle
- : Steel Rule vs Bottle Test
- : Eccentricity Test



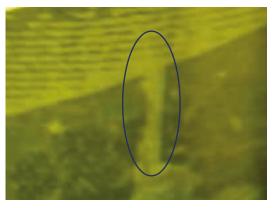


If labels are applied over large seams or double seams on bottles the seams raise the label, and in effect create a tunnel too, under which moisture can travel, compromising the effectiveness of the label adhesive.

Our uncoated stocks are protected from moisture penetrating the top layer of the stock.

When moisture test are performed on these stocks the water sits on top of the stock and the label does not get waterlogged or go grey - the opacity is maintained when wet.

But if moisture gets behind the labels – the adhesive may be compromised and as a result the labels may lift off the product they have been applied on.



Images (top to bottom): Large seam on bottle

- : Label applied over a large seam the un-adhered areas are visible and this coupled with the heavily embossed label creates tunnel under which moisture runs and pools behind the label, thus creating bubbles / distortions in the label
- : Water beading on top of our uncoated label stocks, which include a master process for moisture protection with the added wet strength of our Oilskin varnish for extra protection from moisture





VIP & Labels

VIP (Variable Information Printing) is often an area that may get overlooked. But it is a service that increases in necessity as companies grow.

Rapid Labels is New Zealand's largest distributor of Zebra thermal printers and we are also Gold Partners of Honeywell (which now encompass Datamax and Intermec brands).

We also stock a range of blank labels and thermal ribbons to suit your thermal printing needs.

Examples of when variable information labels are required are courier labels, outer carton labels and pallet labels.

By supplying the labels for your product, blank labels, courier, carton and pallet labels, along with thermal printers and consumables - Rapid Labels is essentially your one-stop shop!

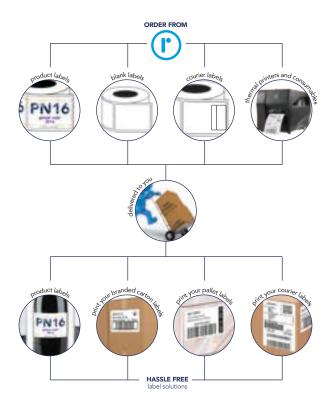
For more information, please take a look at our Catalogue or contact us.



ZT230 Zebra Printer Series



Thermal ribbon range



We've got it all under one roof













Linerless Labels

Linerless labels are labels that do not have a liner/backing paper.

The labels have a release coating applied to the top of the face-stock to prevent the adhesive (label) sticking onto itself.

The advantages of linerless labels:

- No unnecessary waste to dispose of no liner wastage
- Gaining efficiencies during the label application process
- User does not have to pause to peel label off liner
- User doesn't need to pause to deal with liner clean workspace
- Print variable label lengths from one roll for different labelling requirements
- Less waste disposal results in reduced carbon emission

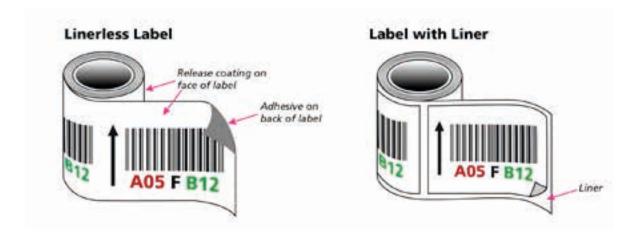
Ideal applications to transition from regular direct thermal labels to linerless labels is in the Freight, Logistics, Warehousing and Pack House environments.

Rapid Labels has a unique offer in that we can supply the linerless labels and/or the printer and software that are capable of printing onto linerless

We have a range of thermal desktop, tabletop and mobile printers that support linerless labels, or contact us to find out if we can help you retrofit your printer to handle linerless labels.

Contact us if you have any questions or would like more information.

The image below illustrates the difference between linerless labels and labels with a liner.







Technical Terms

Cobb Testing

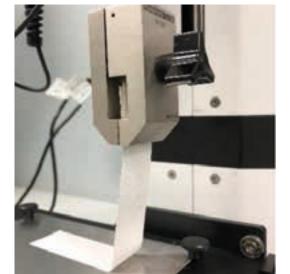
This is the industry-standard lab test which measures the amount of moisture the paper absorbs over a fixed period of time. Rapid has invested in an in-house Cobb Testing kit.

Scuffing

A roughing up of the label, produced from glass-to-carton or glass-to-glass friction. It makes the label look second-hand.

Chipping

Nicks in the top or bottom of the label, generally caused during packaging into cartons with dividers.



Adhesive Tests

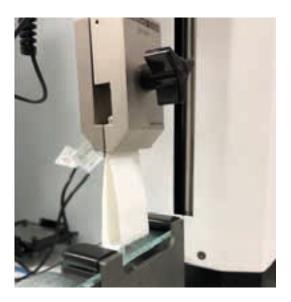
There are a series of tests that can be performed by our paper manufacturers to test the adhesive strength of our label stock.

Loop Tack Test - This test is used to measure the tack force / strength of pressure sensitive adhesives, particularly those that form a bond rapidly upon contact with another surface. The tack force is that which is required to separate the adhesive from the adhered shortly after they have been brought into contact.

90° Peel Force Test – The goal of this test is to determine the adhesive strength of the material. The 90° test requires a 90° peel test fixture to determine the adhesive strength between a flexible (label/stock) and rigid substrate (plate), where the plate lies horizontally with the gripped end of the label stock sticking up perpendicular while the rest is bonded to the plate so that it forms an 'L' shape.

Coat Weight Comparison – This test is performed by weighing the difference before and after two procedures are performed on the adhesive. First is a solvent wash of the adhesive, which is followed by 40°C / 30mins oven dry. The test is used to determine the amount of adhesive that is on the label

For any more information or if you have any queries about what we have outlined in this Label Guide, please contact us: thehub@rapidlabels.nz or 0800 865 223



Images (top to bottom): A part of the Cobb Testing process, Peel Force Test, Loop tack Test