

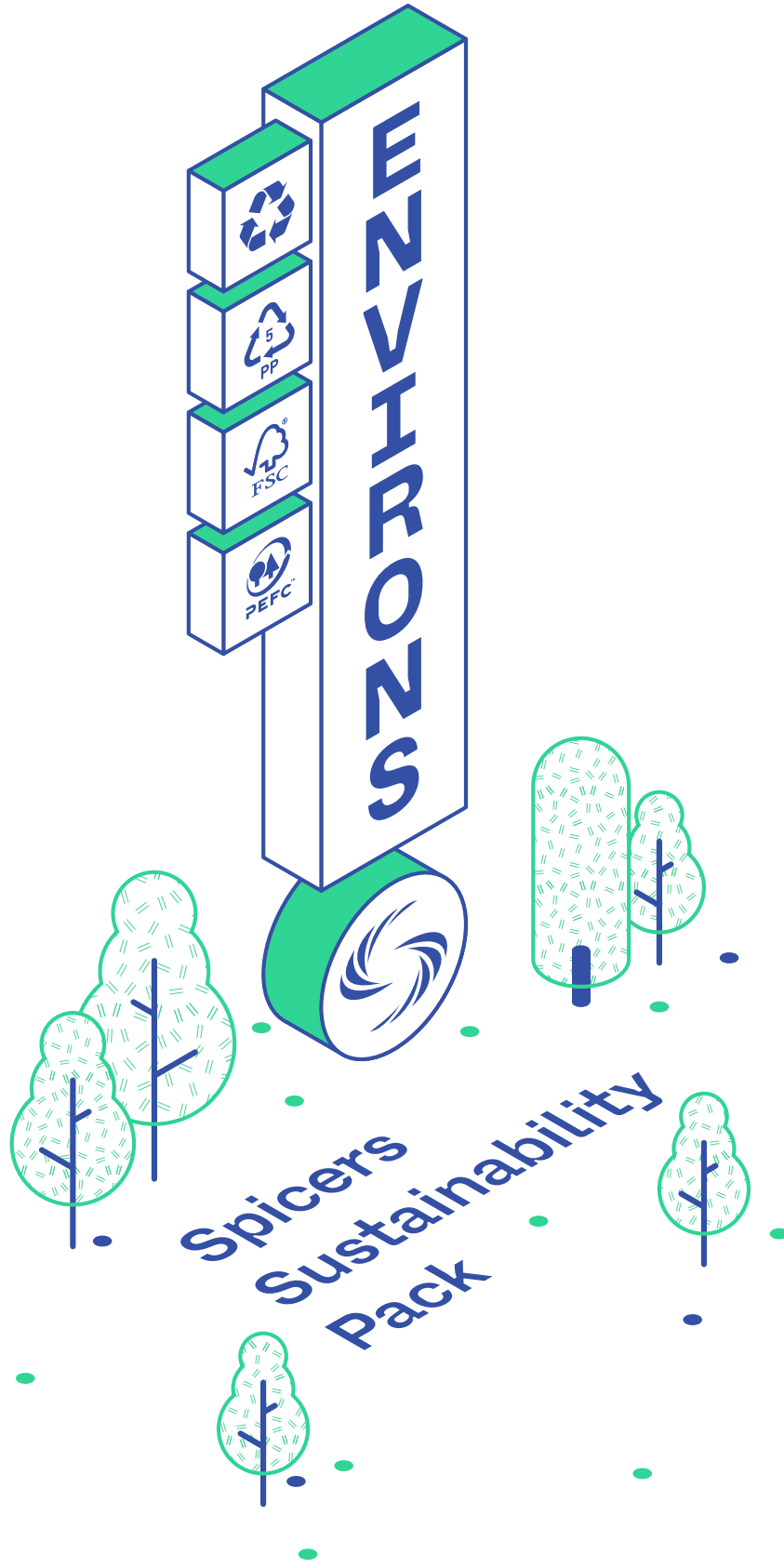
GREEN ROONS

Products that help preserve the earth.



Spicers Sustainability Pack





**Spicers
Sustainability
Pack**

Spicers provide a range of sustainable and environmentally friendly solutions for your printing requirements.

With industry leading brands, our tested and approved substrates are sure to perform both technically and aesthetically during all processes. The Spicers product portfolio includes a range of sustainable paper-based, polypropylene and non-PVC products.

We are committed to the development of sustainable products and services which help our customers and their clients achieve their sustainability goals.

Delivering greener solutions.

Information contained in this brochure is accurate at the time of printing and is sourced through Spicers Supply Chains.

For further enquiries about the information included in the brochure, please contact Spicers Australia. Contents of this brochure must not be replicated or used without the permission of Spicers Australia.

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Spicers Sustainability Statement

Sustainability is integral to Spicers business strategy, ensuring we conduct everyday business in a responsible & ethical manner that considers our employees, shareholders and the environment, now and in the future.

As a leading wholesale and distributor of commercial print, labelling, signage and visual display solutions, a key sustainability focus for Spicers is to continuously improve the supply chains of its operations. This encompasses resources used in fulfilling orders, conducting day-to-day business and waste management. Spicers continues to promote responsible and sustainable business practices across the organisation, which positively impacts the Company's operational footprint.

Spicers is committed to managing its operations to comply with applicable environmental legislation in all regions that we operate.

Supply chain focus

Our products are sourced with consideration of environmental factors; Measures to improve environmental impact, such as use of certified forest fibres, alternative renewable energy sources, reducing chemical, energy and water usage and effluent, and manufacturing products that contain recycled content, are discussed with key suppliers.

All operations are committed to maintaining 'Chain-of-Custody' (CoC) and other environmental certifications, such as Forest Stewardship Council (FSC®) or Program for the Endorsement of Forest Certification (PEFC™) for sustainably sourced and manufactured papers. Over 95% of fibre-based products sourced by Spicers are either FSC® or PEFC™ certified.

Spicers provides a wide range of products with strong sustainability and environmental credentials, particularly recycled paper products and alternative fibre products such as cotton, hemp or bamboo.

External audits on Spicers Supply Chain processes are performed on a yearly basis by SGS (formerly called Société Générale de Surveillance) to ensure compliance with CoC and various other criteria.

Our Supply Chain team evaluate fibre-based products from suppliers to ensure they comply with the illegal logging legislation introduced by the Australian Government. Records are kept on each supplier that detail the species of tree used and the country of origin.

Our selection criteria for Paper & Board manufacturers ensures they must have an environmental management system in place that meets, or exceeds an internationally recognised standard. For non-fibre-based materials we ensure considerations are given to attributes such as compostability biodegradability or recyclability.

Operational footprint

The Company's operations include warehouses, transportation and offices. All operations take responsibility for legal compliance and the management of environmental impacts related to their business activities.

Emphasis is placed on initiatives that reduce our environmental impact, such as energy efficiency (LED lighting and Solar Panels) and waste management. Our sites collect and recycle waste paper, cardboard and other materials, such as wood, pallets, plastics, acrylic and PVC where possible.

We promote sustainable business practices across the organisation, ensuring that we conduct ourselves responsibly and ethically, and continually looking for opportunities to strengthen the sustainability of our supply chain.

We make available the latest environmental and technical information on our products to customers, staff and stakeholders through training and education. The ongoing development of sustainable products and services assist our customers and their clients achieve their sustainability goals, print and production requirements.

By thinking and acting sustainably, we strive to deliver excellent customer service and position the company and industry for a strong future.

Sustainable targets and practices

Spicers is working towards achieving targets for energy consumption, CO₂ emissions and sustainable practices in our operations.

TARGET	BASELINE H1 2020	H2 2020	H1 2021
40% Reduction in Electricity usage and Greenhouse gas. Installation of Solarpanels and low power LED lighting.	100%	93%	89%
100% Fibre based products sold with CoC - FSC Certified or PEFC Certified. Currently 85% of our fibre-based products are FSC or PEFC Certified, where available we will transition all products.	79%	82%	85%



Recycled packaging materials and waste.

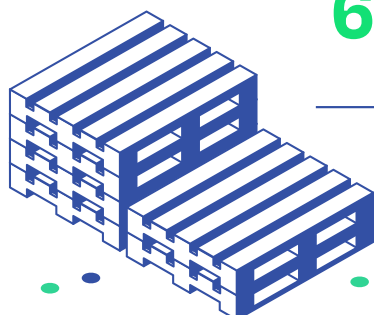
Pallets, shrink wrap, offcuts, office paper and pastic waste are collected in designated bins and recycled or reused where possible.

Spicers Energy & CO₂ Emissions

96% Of all lights in Offices and Distribution Centres have been upgraded to low power LED lighting.



60% Of the national MHE/Forklift fleet are now electric.



33% Distribution Centres have solar panels installed with more scheduled.



What is sustainability?

Sustainability focuses on satisfying the needs of the present without adversely affecting conditions for future generations. The concept of sustainability includes three pillars: economic, environmental, and social – also known as profits, planet, and people.

Sustainable product design

Sustainable product design (also known as eco design) considers the environmental impacts of the entire product lifecycle – from conception to disposal. It's focused on ensuring that natural resources are only used at the same rate as they can be replenished. Sustainable product design means better environmental outcomes and can also reduce operating costs by lowering energy consumption.

What environmental impacts should I consider?

There are environmental impacts at each stage of the product design and development process. As a product goes through these stages, energy and water are used and waste, pollutants and greenhouse emissions are created.

Raw material extraction

Extracting natural resources uses water and land, generates carbon dioxide (CO₂) emissions, and produces waste that must be disposed of.

Manufacturing

The manufacturing process often relies on systems that use electricity, water, gas and fuel to transform these raw materials, creating environmental impact.

Distribution

The production of CO₂ has a significant impact on the environment and is a key driver of climate change. Products distributed by road or air generally have a larger environmental impact than those transported by sea or rail.

Use

Depending on the product, additional energy, fuel, water or other materials may be required for that product to achieve its function. If a product needs other products or services during its lifetime (e.g. a printer might require ink cartridges and servicing), these aspects – along with durability – must be considered in the product's design.

End of life

Will the product go into landfill or be recycled at the end of its life?

Designing more sustainable products

By identifying the environmental impacts of a product, businesses can consider ways to reduce these impacts without compromising the product's quality.

Sustainable product design considers:

Materials

- Source local materials to reduce transport costs and CO₂ emissions
- Use natural fibres wherever possible
- Use materials and designs that enhance durability
- Consider using compostable and recyclable materials

Process

- Redesign the product to use less raw materials
- Select manufacturing partners with green credentials
- Look for ways to make the product more energy efficient during production and use
- Find ways to use offcuts and damaged stock to reduce waste
- Reduce packaging wherever possible

Marketing

- Let customers know about your sustainability focus
- Get certification from environmental protection agencies
- Consider a trade-in or product recycling program

Sustainability Loop

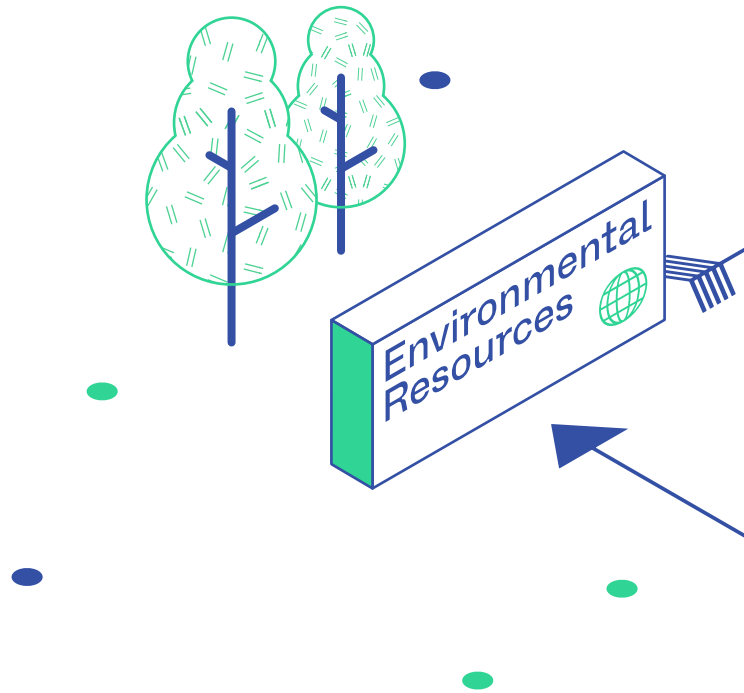
Spicers are committed to operating sustainably. Our focus is on meeting the needs of today’s market without compromising the ability of future generations to meet their needs.

As a solutions-focused company with a passion for supplying quality print, packaging, signage and architectural products, we create innovative and sustainable solutions for some of Australia’s leading brands.

Responsible sourcing is an important part of our sustainability approach. We conduct comprehensive due diligence to ensure our suppliers source wood fibre from legal and well-managed forestry (with a preference for internationally recognised forest certification schemes) or recycled sources. Wherever possible, we seek to offer recycled, Australian made and carbon-neutral product options.

The environment is more important than ever to Spicers and to our customers. That is why we offer products from manufacturers and suppliers that are committed to smarter and greener practices - in fact its our policy.

We are also proud to partner with manufacturers and suppliers with similar approaches to sustainability.



Environmental Resources

Food from plants and animals, wood for cooking, heating, and building, metals, coal, and oil are all environmental resources. Clean land, air, and water are environmental resources, as are the abilities of land, air, and water to absorb society’s waste products.

Spicers holds chain of custody certification from the Forest Stewardship Council (FSC)® and Programme for the Endorsement of Forest Certification (PEFC)™. These accreditation demonstrates that we support sustainable forest management and assures our customers that our products are ethically produced and meet strict environmental, economic and social standards.

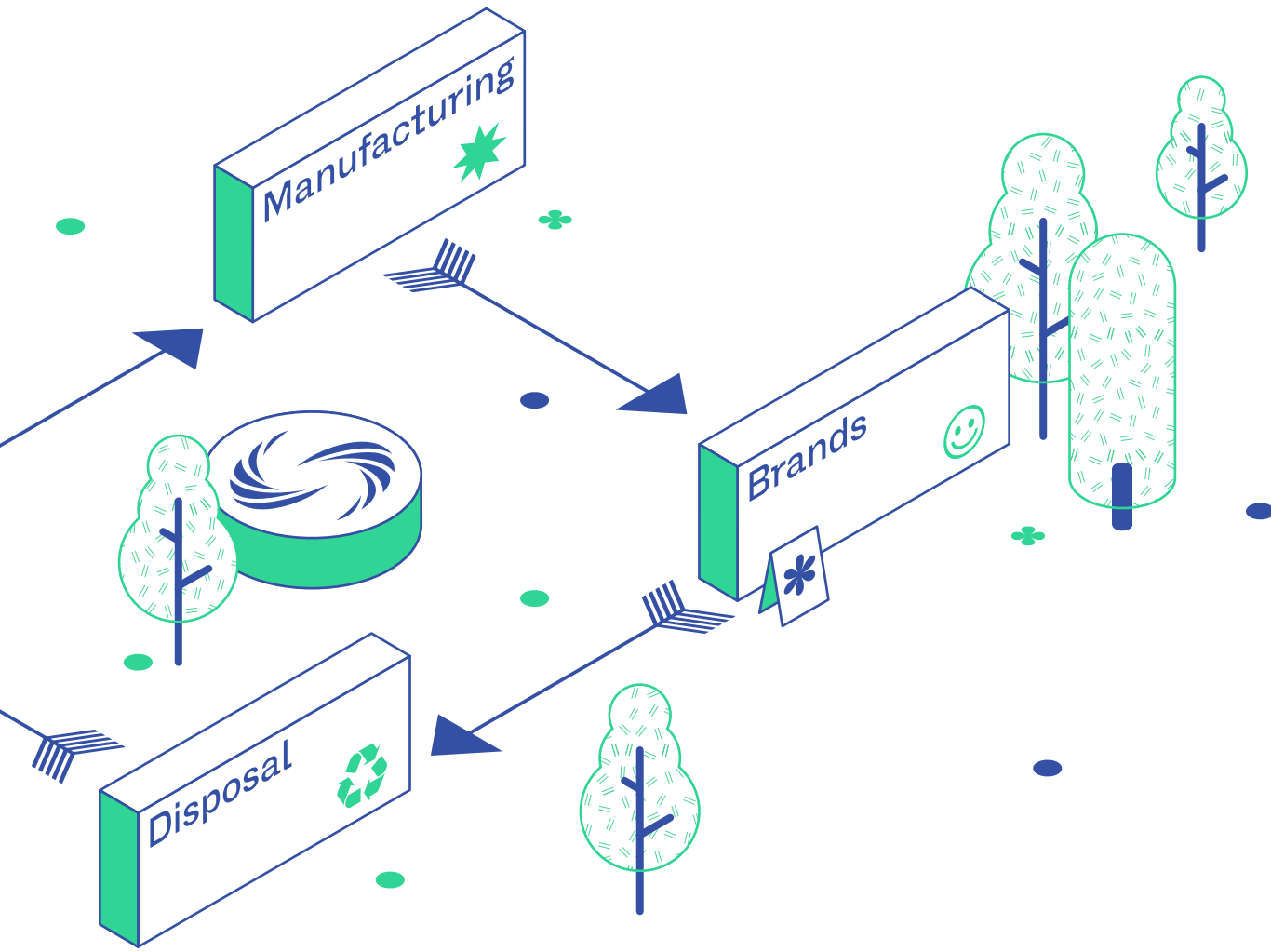
Manufacturing

Sustainable manufacturing is the creation of manufactured products through economically-sound processes that minimise negative environment impacts while conserving energy and natural resources. Sustainable manufacturing also enhances employee, community and product safety.

Businesses lead the development of manufacturing systems that use recycled materials, avoid waste and improve financial sustainability of resource recovery systems.

Spicers practices responsible sourcing by seeking products which offer recycled, Australian made, and carbon neutral options wherever possible.





Brands

The role of brands is critical in improving the design of products to avoid waste and to take into consideration its requirements and appropriate applications.

Brands have their own environment and sustainability programs and policies that help ensure its products and services have a positive impact on people and the environment – from the raw materials it uses, practices at its suppliers sites, modes of transportation, use by consumers, and eventual disposal. Sustainability programs are introduced to support social and environmental issues, and to meet consumer demand.

Spicers can guide customers in selecting the right substrates considering economic, storage, weight, environmental and production requirements.

Disposal

Businesses and industries also play an important role in investing in new processes, products, and technologies that can lead to significant changes in the generation, management and disposal of waste.

Clear labelling of disposal methods can be included on applications for end users to dispose for kerbside waste.

Recycling programs which have dedicated drop-off or collection points are introduced as part of a process to ensure responsible disposal of materials. Using a dedicated recycling service can save money by diverting waste from landfill and reducing the weight and cost of general waste collection.

Spicers is proud to partner with suppliers and manufacturers which have recycling programs, an added benefit for our customers.



Green Guide

By choosing substrates that are environmentally sound, you can continue to enjoy the many benefits of using print, while keeping your environmental footprint to a minimum.

The purpose of this summary is to provide accurate and 'easy-to-access' information to assist in your environmental stock choices.

Fibre



Recycled Content

To obtain the recycled logo, a product must contain recovered pre-consumer materials, which are off-cuts from printers and converters turned into recycled pulp, or post-consumer materials, which are the re-introduction of manufactured scrap material that can be collected after it has been disposed of by its end users.



Forest Management

Papers are completely derived from resources which are managed to ensure their sustainability for generations to come.



Forest Stewardship Council® (FSC®)

A non-government and non-profit organisation initiative that creates a globally recognised certification overseeing all fibre sourcing standards. This provides guarantees for the consumer that products are made of wood chips from well managed forests, other controlled sources and reclaimed material with strict environmental, economical and social standards. For more information visit info.fsc.org



Programme for the Endorsement of Forest Certification™ (PEFC™)

A non-governmental and non-profit organisation that promotes sustainably managed forests through independent third party certification and chain of custody. It is a framework for the mutual recognition of national or regional forest certification schemes. National governing bodies apply for the PEFC and the council accredit standards and ensure international principles and guidelines are adhered to. For more information visit www.pefc.org

Australian Made



Australian Made

Paper manufacturing in Australia is recognised as having a commitment towards continued improvement to sustainable operations. Purchasing Australian made recycled products contributes to the reduction of local landfill.

Carbon Neutrality



Carbon Neutral

The carbon emissions produced in a product's full life cycle are offset through the purchase of carbon credits, which in turn offset emissions from transport, electricity use and other sources.

The environmental impact of these products has been measured 'from cradle to grave': a complete, independent third party life cycle assessment for products that are certified carbon neutral. Manufactured carbon neutral is when the calculated carbon footprint is restricted to the manufacturing process within the mill gates only, and does not typically include delivery to the consumer, and end of life emissions.



National Carbon Offset Standard (NCOS)

The Australian government certification that sets the requirement for achieving carbon neutrality. This helps reduce the carbon footprint in the paper production process, and assists consumers to make informed choices and interpret carbon neutral claims.



Renewable Energy

Products manufactured by a mill that obtains a significant proportion of its energy requirements from renewable energy sources, such as hydro, wind, solar or biomass.

Environmental Management Systems



Environmental Management Systems (EMS)

Business process that ensures that all environmental matters are addressed through documented systems.



Elemental Chlorine Free (ECF)

Paper pulp bleached using chlorine dioxide and non-chlorine agents, instead of using elemental chlorine.



PP Recyclable

PP, or polypropylene plastic, is known for its durability, strength and low weight. It is increasingly being accepted in curbside recycling programs.



Recyclable

A substance or object that can be recycled.



Life Cycle Assessment

The systematic analysis of the potential environmental impacts of products or services during their entire life cycle.



ISO 14001

Provides a framework that ensures organisations minimise their negative impact on the environment and comply with applicable laws, regulations and other environmental requirements.



ISO 9001

Organisations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements.



ISO 14025

The standard used to establish the principles and specifies the procedures for developing environmental labels and declarations.



ISO 9706

Specifies the requirements for permanent paper intended for documents. Minimum strength, minimum content of substance, maximum content of easily oxidized material, maximum and minimum pH values of the paper are measured.

Sustainable fine paper and packaging boards

Spicers provide a comprehensive range of fine paper and board solutions for all your commercial print and packaging requirements. With industry leading brands our tested and approved papers and boards are sure to perform both technically and aesthetically during all processes.

Our print and packaging products are eco-friendly, recyclable, FSC® and or PEFC™ certified. We supply trusted products and exclusive brands such as Monza Recycled, Revive Laser, Precision Laser, Splendorgel, Stephen, Kraftpak, Primo GC1 and Perfecto GC2 .



Monza Recycled

Monza Recycled is renowned for its ability to reproduce amazing and effective print results, Monza was one of the first papers in Australia to gain FSC® Mix certification. Combined with its recycled content, Monza Recycled is the trusted choice of Specifiers and Printers.

Available in Gloss and Satin.
Available in Digital sheets.

Grammages include:
100, 115, 130, 150, 170, 200, 250, 300, 350 & 400gsm.



Revive Laser

Revive Laser is a 100% recycled uncoated grade with good opacity, stiffness and an excellent surface for printing. With good dimensional stability, Revive Laser provides precise registration in multiple presses.

Available in Digital sheets.

Text: Made in Australia, Revive Laser text is FSC® Recycled certified and carbon neutral.
Grammages include: 80, 90, 100, and 110gsm.

Cover: Imported FSC® Recycled certified.
Grammages include: 135, 160, 200, 250, 300 & 350gsm.

PRECISION

Precision Laser

Precision is an all purpose offset with superior bulk and opacity and competitively priced.

Text: Made locally by Opal Australian Paper, Precision text weights are PEFC™ certified.
Grammages include: 70, 80, 90, 100, 110 & 120gsm.

Cover: Imported, FSC® Mix certified.
Grammages include: 135, 150, 200, 250 & 300gsm.

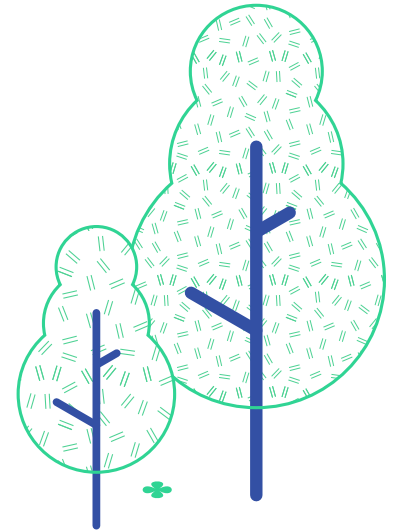
S P L E N D O R G E L

Splendorgel

Exclusive to Spicers and the ultimate in uncoated splendor. The extensive range includes smooth, linen and hammer finish. A cream colour has been added to the range. Both Splendorgel and Splendorgel Textures are FSC® certified.

Available in Digital sheets.

Grammages include:
Splendorgel Smooth: 100, 115, 140, 190, 300, 340, 400 & 470gsm
Splendorgel SPI: 115, 160, 230, 270, 300, 340 & 400gsm
Splendorgel SPX: 100, 115, 140, 190, 300 & 340gsm
Splendorgel Cream: 100, 140 & 300gsm
Splendorgel Linen: 115, 280 & 350gsm
Splendorgel Hammer: 280gsm



Stephen™

Stephen

Stephen is a tactile paper with a contemporary colour palette. Economical with lots of character, Stephen is crafted using 15% cotton fibres that give softness to the surface, and 20% recycled content adding volume and strength. Stephen is also FSC® Mix certified.

Available in 7 colours.
Available in Digital sheets.

Grammages include: 120, 250 & 360gsm.

KRAFTPAK

Kraftpak

Kraftpak's market leading smoothness delivers sharper images and excellent solid ink coverage, with the added benefit of being durable and strong.

Produced with recycled fiber, providing an option for meeting corporate sustainability goals. Kraftpak is FSC® certified, fully recyclable and compostable.

Grammages include: 225, 259, 283, 332, 356 & 386gsm.

PRIMO GC1

Primo GC1

Premium double coated folding boxboard with coated reverse.

Suitable for fastmoving consumer goods, food, fragrance, cosmetic, toiletries packaging, confectionery and bakery boxes, POS, greeting cards, multimedia products, swing tags, posters.

Primo is FSC® certified, biodegradable and fully recyclable.

Grammages include: 205, 225, 250, 270, 290, 315 & 340gsm.

PERFECTO GC2

Perfecto GC2

A natural manilla backed board that has a smooth double coated surface with excellent bulk. It is an economical board ideal for any packaging applications.

Suitable for fragrance, cosmetics, pharmaceutical, confectionery and premium packaging, folders, POS and book covers.

Perfecto is FSC® certified, biodegradable and fully recyclable.

Grammages include: 215*, 235*, 250, 275, 310, 325 & 370gsm.

**Available on indent only.*

Application Icons Guide

Below are icons used throughout the Sustainability pack to guide you through a range of applications and features to assist in your environmental stock choices.



BANNERS



FLOOR GRAPHICS



PHOTO PRINT



CAD



POSTERS



ROLL-UPS



BILLBOARD



OUTDOOR APPLICATIONS



INDOOR APPLICATIONS



FINE ART PRINTS



POINT OF SALE



PROOFS



BACKLIT



EXHIBITION PANELS



LIGHT BOXES



LAMINATED APPLICATIONS



POP-UPS



MOUNTING BOARD



FRONT LIGHT



DYE SUBLIMATION



WALL GRAPHICS



WINDOW GRAPHICS



TRANSIT GRAPHICS



VEHICLE WRAP

Features Icons Guide



BLOCKOUT



AQUEOUS
MEDIA



ECO SOLVENT
MEDIA



UV MEDIA



RIGID SHEET



LAMINATES



ROLLS



ADHESIVE



ADHESIVE



REMOVABLE



REPOSITIONABLE



SELF ADHESIVE



LATEX MEDIA



HIGH
WHITE



DIRECT FOOD
CONTACT SAFE



FREEZER
SAFE



PVC
FREE



FULLY RECYCLABLE
(KERBSIDE)



BIODEGRADABLE



ARCHIVAL



FDA
APPROVED



LIFE CYCLE
ASSESSMENT



ECO
CALCULATOR




COMPOSTABLE



RECYCLE
COLLECTION
AVAILABLE



Sustainable Choices

	 FSC [®] CERTIFIED	 PEFC [™] CERTIFIED	 AUSTRALIAN MADE
ACE SCREENBOARD	●		
ACE SCREENBOARD KRAFT	●		
ACE OUTDOOR	●		
RE-BOARD PRINT	●		
RE-BOARD KRAFT	●		
DIGISTAR HI-BULK 1/S		●	
TRUE HI-BULK 2/S	●		
BAUHAUS TECHPLOT		●	●
BAUHAUS PHOTO PAPER	●		
BAUHAUS POSTER PAPER	●		
BAUHAUS STYLING NEW YORK	●		
CORFLUTE			●
ENCORE 100% RECYCLED CORFLUTE			●
PROMEG			●
3M ENVISION			
KAVALAN			

● Applicable to unprinted Poster paper.

Please refer to our technical fact sheets for additional information related to FSC[®] claims.



Fiber based

Our paper based offering provides you with a market leading range of essential substrates in a coated and uncoated finish as well as some unique products that stand out from the crowd.



FIBER BASED

Ace Screenboard



Ace Screenboard is a premium coated display board ideally suited for screen and large format digital printing.

Features and Applications

- Coated both sides with bright, white surface
- Super smooth surface to enhance print results
- Clean pure white centre
- Premium virgin fibre centre ensures outstanding cutting results
- High bulk & stiffness
- FSC® certified
- Ideally suited for Hanging Signage, POS displays, Aisle Fins, Header Cards, Category Signage, Promotional Signage, Shop Window Promotions, Exhibition Stands, Mounting

FIBER BASED

Ace Screenboard Kraft



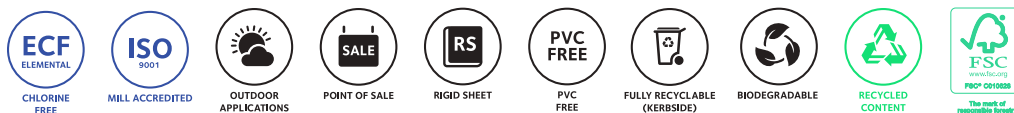
Ace Screenboard Kraft is an uncoated display board with a natural, kraft surface on both sides that is ideally suited for large format digital printing.

Features and Applications

- Natural kraft look and feel
- Clean, pure centre
- Outstanding stay flat properties
- FSC® certified, easy to recycle
- Ideally suited for Hanging Signage, POS displays, Aisle Fins
- Header Cards, Category Signage, Promotional Signage, Shop Window Promotions, Exhibition Stands, Mounting

FIBER BASED

Ace Outdoor

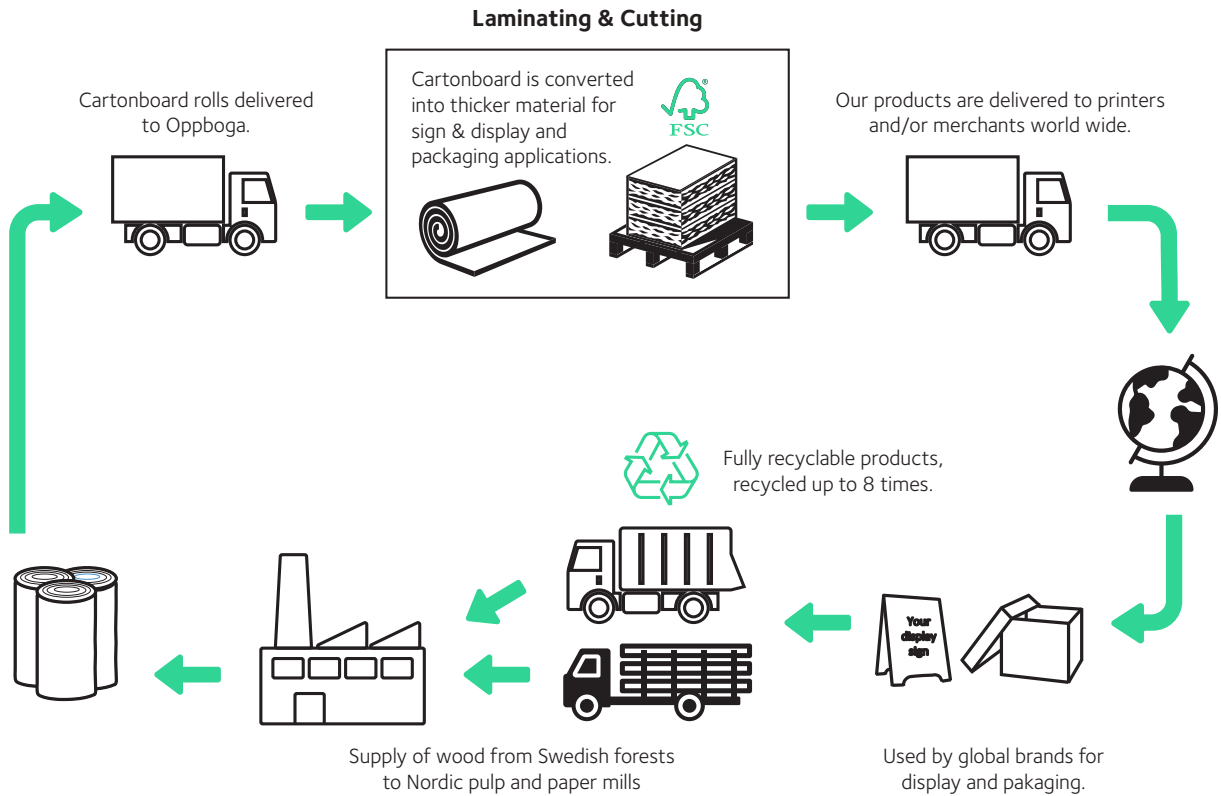


Ace Outdoor is a 100% fibre-based coated display board designed for short-term wet & moisture sensitive environments.

Features and Applications

- Coated both sides with white surface
- Up to 60% post-consumer recycled content
- FSC® certified
- Ideal for moisture sensitive indoor applications: Chiller Signage, Door Entrance Signage, Mop Trays, Horticultural POS
- Short-term outdoor applications: A-frames, Bollard Covers, Election Signage, Petrol Station Pump Toppers, Sign on a Fence
- Promotions & Events: Event signage, Ice buckets, Directional Signage
- Plastic alternative applications: Clip Strips, Product bands, flower tickets, alternative to PE-coated cartonboard

A sustainable & recyclable process



How is Ace Screenboard sustainable?

Ace Screenboard and Ace Outdoor are supplied from Oppboga Mill in Sweden. In Sweden there is the Forestry Act, first passed in 1903. This ensures responsible management of forestry resources that benefits both quality and growth. As a result, on average for every tree felled in Sweden, three new ones are planted. Ace Screenboard is FSC® certified.

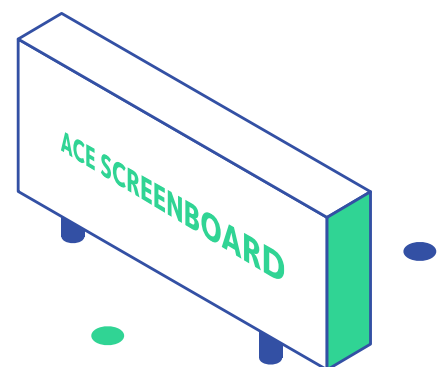
Through the sustainable and recyclable processes at Oppboga, cartonboard rolls are converted into thicker sign and display materials. These materials are then distributed to printers and merchants around the world. At the end of its lifetime these materials can be recycled (up to 8 times) through regular paper waste streams or if not collected, will biodegrade.

Oppboga are committed towards the war against plastic, ensuring they do not use any hazardous chemicals or products that can have adverse impacts on the environment. Their products are produced from sustainable raw materials, that are both recyclable and safe to use.

How can Ace Screenboard be disposed of to close the Sustainability Loop?

Ace is fully recyclable and biodegradable. Not only is it easy to recycle in paper waste programmes, it can be recycled up to 8 times!

If not recycled, the product is biodegradable within approximately 12 months.



FIBER BASED

Re-board



Re-board® Print and Kraft is the original, rigid paper core board with a unique engineered fluted core. This strong and rigid but very light-weight board is easy to transport, assemble and disassemble.

Re-board® Print has a white surface that is made from 100% recycled fibres, and a strong core produced using a water based glue. The unique fluted core enables this sheet to be rapidly cut into any conceivable shape. This versatile high-quality board can be digitally printed or finished with a decorate laminate.

Re-board® Kraft has a brown surface made from a mix of recycled fibres and virgin fibres in both the core and the surface, usually a mix of 25 % recycled fibres and 75 % virgin fibres. Its strong core is produced using a water based glue, and this fully recyclable board is ideal for printing directly on the substrate with UV, latex or water technology for high performance results.

Re-board Print and Kraft have no chemical bleaches added in its manufacturing process, and Re-board strictly adhere to the REACH framework for handling of chemicals.

Features and Applications

Re-board® Print:

- Fully recyclable
- Suitable for UV inkjet print, shape cut, v-notched, curved and laminated
- Unique crush resistant core
- Ideal for short to medium structural applications. POS displays, shop fitouts, exhibition stands, mounting boards, header cards and many more
- FSC® certified

Re-board® Kraft:

- Fully recyclable
- Suitable for UV inkjet print, shape cut, v-notched, curved and laminated
- Ideal for short to medium structural applications. POS displays, shop fitouts, exhibition stands, mounting boards, header cards and many more
- FSC® certified

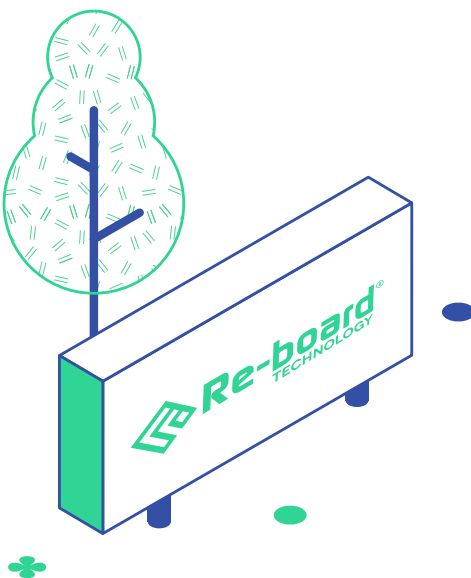
How is Re-board® sustainable?

Re-board® Technology AB is a privately held company based in Norrköping, Sweden.

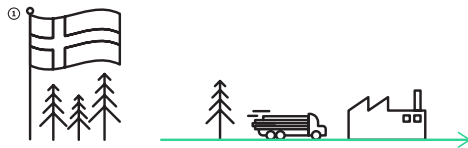
Their main product, Re-board® is the pioneer in eco-friendly, sustainable rigid paper core boards. The product is manufactured in Sweden, where the Re-board® factory as well as its suppliers are FSC® certified. The paper is then turned into a patented corrugated board laminated using a water-based glue. The sheets are flat packed on pallets and distributed to stockists using the most efficient means. At the end of the campaign Re-board® is designed to be disassembled, flat packed and re-used. Re-board® is FSC® certified.

How can Re-board® be disposed of to close the Sustainability Loop?

At the end of its lifetime the entire fully paper based material of Re-board® can be recycled as paper or paper packaging material. The high-quality fibres of Re-board® can be recycled up to 7 times, therefore by injecting the new fibres into the recycling system, more material can be used in the manufacturing of other products.

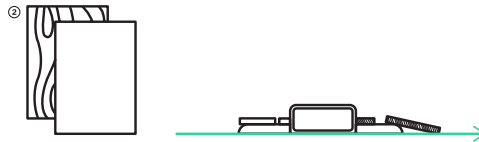


Re-board Product Journey



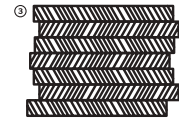
Trees grow in the Nordic forests.

Using wood from Nordic forest guarantees sustainable forestry, thanks to the strong forestry acts in these countries. The forests are primarily harvested for timber, i.e. wood for building and construction. Whatever that can't be used as timber is sent to paper mills, like our suppliers.



Our supplier's paper mill turns wood first into pulp, then into paper.

Some of the paper mills are conveniently on the other side of the road from Re-board® Technology. Depending on the product requirements, the paper is made from new fibres, recycled fibres or a mix of both.



At Re-board® Technology, the paper is turned into our patented paper core board.

We uphold the highest standards for our working environment, using as little chemicals and additives as possible. We laminate Re-board® using a water-based glue.



On site, the sheets are folded and set up into the final product.

A campaign can range from days to several months, with some installations lasting years.



The sheets are printed and cut into the desired colour and shape at print houses.

The printed sheets are flat packed again and delivered to the end user.



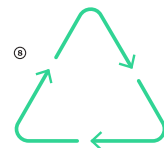
Re-board® sheets are distributed to stockists using the most efficient means.

This is by truck in Europe, or by boat for longer distances. Sheets are flat packed on pallets. Since Re-board® is very light (>2 kg per m²) less fuel is needed compared to chipboard or PVC.



At the end of the campaign, Re-board® can be disassembled, flat packed, and transported to be re-used.

This is ideal for temporary events like pop-up shops and trade fairs, with some installations lasting years.



At its end of life, the material is recycled as cardboard.

The high-quality fibres mean it can be reused up to 7 times before the fibre is worn out.

FIBER BASED

Digistar Hi-Bulk 1/S



Digistar Hi-Bulk 1/S is a dependable bleach board with a premium coated print surface and light-coated reverse side. Economical without compromising on quality, Digistar Hi-Bulk 1/S is ultra smooth, bright white and designed for all of your high-quality printing and packaging requirements.

Features and Applications

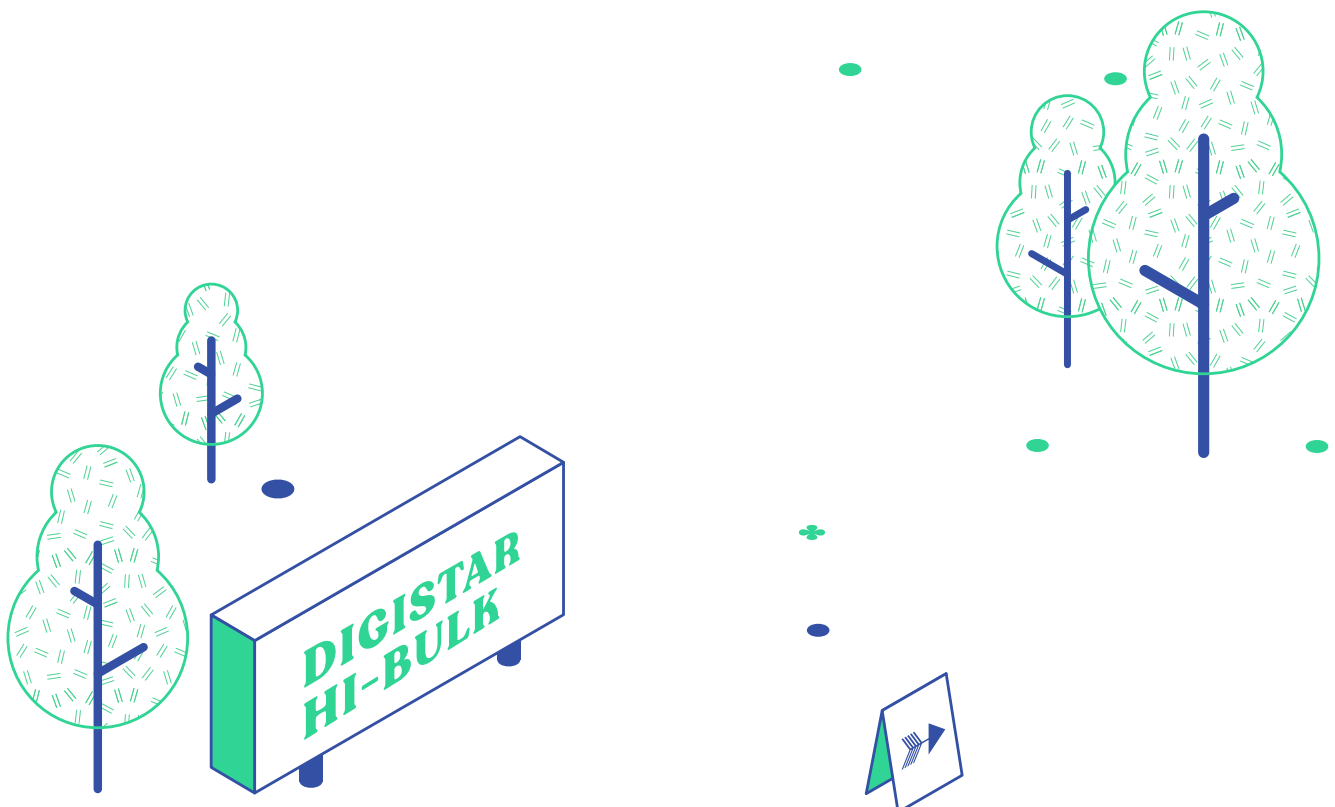
- High white
- Coated ultra smooth surface
- Reverse 'lick' coated
- Light weight and durable
- PEFC™ certified
- Made from high quality primary fibre
- Direct food contact safe
- Cards, covers, multimedia products
- POS, posters and header cards
- Fragrance, cosmetics, toiletries and premium packaging

How is Digistar Hi-Bulk 1/S sustainable?

Digistar Hi-Bulk 1/S is crafted using PEFC™ certified virgin fibres.

How can Digistar Hi-Bulk 1/S be disposed of to close the Sustainability Loop?

Digistar Hi-Bulk 1/S hits sustainability targets as it is Fully Kerbside Recyclable, Biodegradable and Compostable.



FIBER BASED

True Hi-Bulk 2/S



True Hi-Bulk is a premium double coated surface high bulk artboard that is bright white with an ultra smooth surface.

Features and Applications

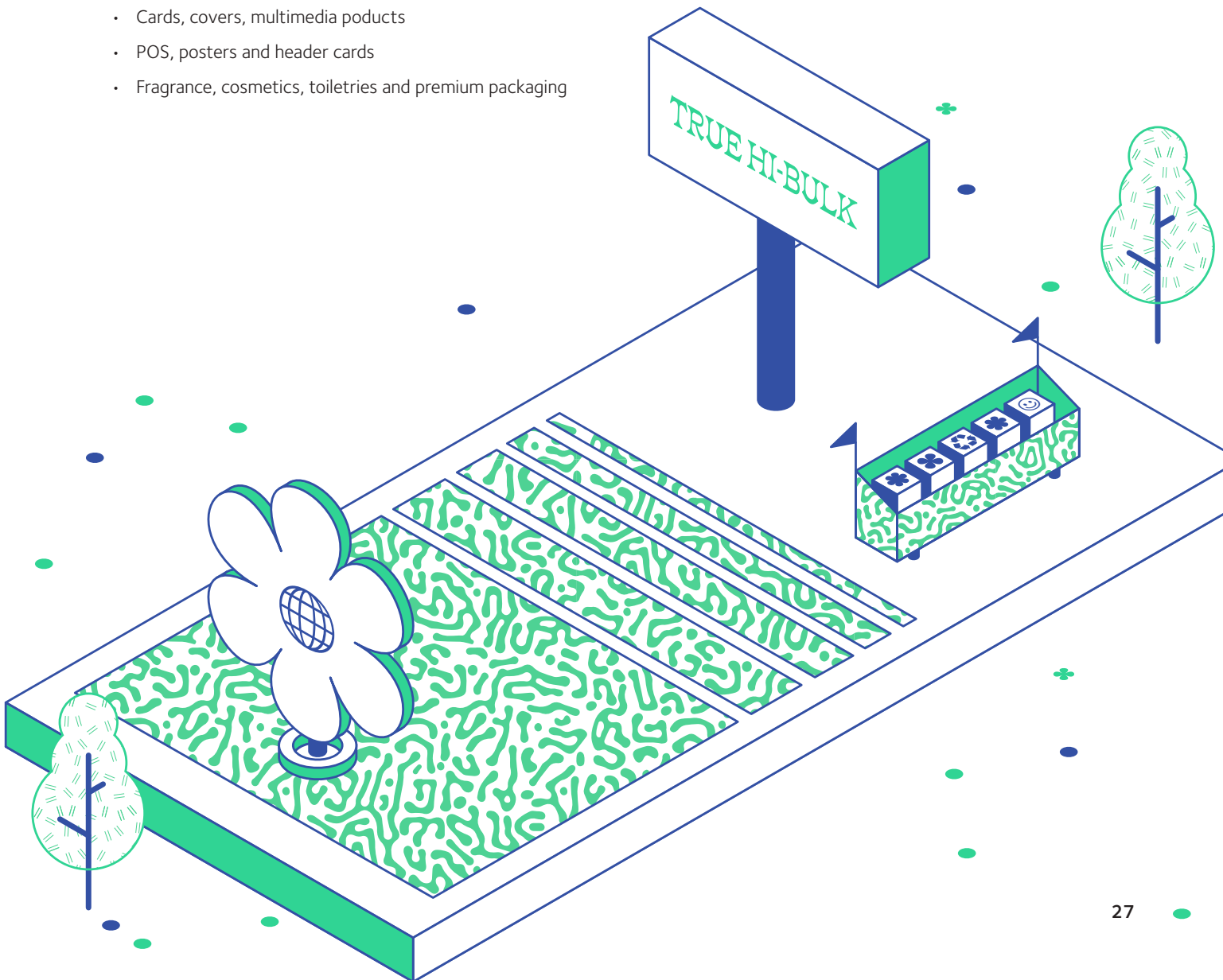
- High white
- Coated ultra smooth surface
- Excellent rigidity
- Economically priced
- FSC® certified
- Cards, covers, multimedia products
- POS, posters and header cards
- Fragrance, cosmetics, toiletries and premium packaging

How is True Hi-Bulk Sustainable?

True Hi-Bulk is made from elemental chlorine free bleached pulp sourced from well-managed forests and controlled sources. It is manufactured by an ISO 14001 certified mill.

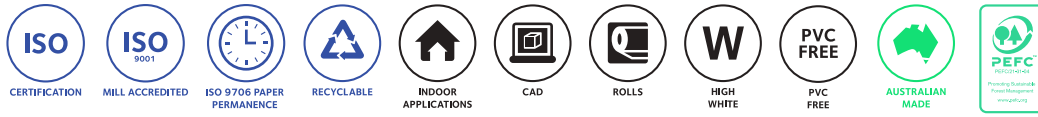
How can True Hi-Bulk be disposed of to close the Sustainability Loop?

True Hi-Bulk is Fully Kerbside Recyclable.



FIBER BASED

Bauhaus Techplot



Bauhaus Techplot Plotter Paper is the benchmark for runnabiity and versatility. It is exceptional on all fronts, with a super smooth ultra white surface it promises to enhance your creative vision.

Superior colour reproduction is achieved via a patented surface treatment, Bauhaus Techplot Plotter Paper's smooth refined finish allows you to admire a magnificent print result on every occasion.

The enviable list of product attributes, coupled with great value, is the perfect vehicle to showcase your creativity.

Bauhaus Techplot Copier Glued or Unglued paper is an uncoated, bond paper suitable for dry toner printing systems.

Features and Applications

- High White paper
- NCOS (National Carbon Offset Standard) available upon request.
- PEFC™ Certified
- Ideal for architectural and engineering plan drawings

How is Bauhaus Techplot Plotter and Copier Paper Sustainable?

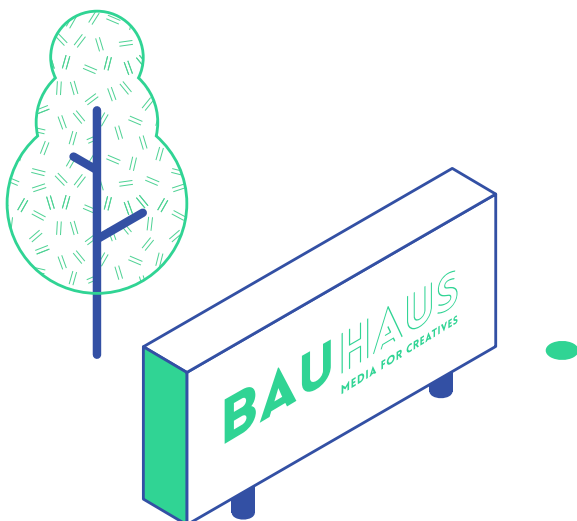
Bauhaus Techplot Plotting and Copier Paper is sourced from Australian Paper a local manufacture. Australian Paper support the local recycling industry by purchasing around \$20 million of waste paper from collection partners each year.

Office shredded paper is re-pulped, de inked and pulped for use in premium recycled office and printing papers at the Maryvale recycling plant, that has the capacity to divert up to 80,000 tonnes of waste paper from landfill each year; that equals a saving of up to 230,000 in carbon emissions from landfill.

How can Bauhaus Techplot Plotter and Copier Paper be disposed of to close the Sustainability Loop?

Bauhaus Techplot Plotter Paper is Fully Kerbside Recyclable.

This means that at end-of-use this product can be placed straight into your home recycling bin as it is. Recycling diverts materials from the landfill waste stream to material recovery and allows reprocessing the material into new products.



FIBER BASED

Bauhaus Photo and Poster Paper



Spicers Bauhaus range of Photo Papers and Poster Papers stand out because they are of the highest quality and they are FSC® certified.

Spicers Bauhaus range of Photo and Poster Papers have a market leading aqueous ink Colour Receiver Layer that ensures that photographers, artists and printers can achieve pin-sharp details and vivid colours. As the paper is coated using a precision “curtain coating system” (that ensures absolute homogeneity), users can be confident of a uniform and superlative print performance across the width and length of the paper.

Spicers Bauhaus Photo Papers are designed to be used with aqueous inks and are available in a matt, satin, gloss, silk and glacier finishes.

Spicers Bauhaus Poster Papers are designed to be used with Solvent, Latex and UV inks and are available in a matt, satin and gloss finishes.

Features and Applications

Bauhaus Photo Papers:

- FSC® certified – Ivory Matt, Satin, Gloss and Glacier or 100% Cotton – Smooth, Etching and Silk
- Market leading colour receiver layer – ensuring pin-sharp details and vivid colours
- Excellent water resistance
- Outstanding lay-flat performance
- PVC Free
- Professional photography, high-end photo prints, professional photo albums, photo card and portfolio folders
- Art reproduction, exhibitions and portraits
- Posters

Bauhaus Poster Papers:

- FSC® certified
- Market leading colour receiver layer – ensuring pin-sharp details and vivid colours
- Excellent water resistance and wet strength
- Heat barrier layer to ensure hassle free printing with latex printers and other high temperature printers
- Outstanding lay-flat performance
- PVC free
- Photo cards, portfolio folders, art reproduction
- Exhibitions, POS signage
- Commercial posters for indoor and outdoor applications

For printed Bauhaus Poster paper check with your local recycling company regarding the compatibility of the ink for their recycling process.

How is Bauhaus Photo and Poster Paper sustainable?

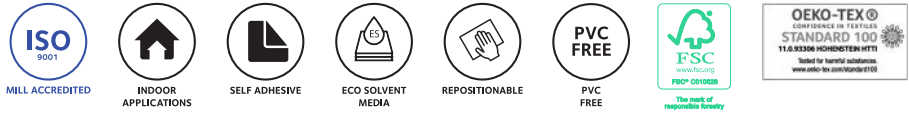
Spicers Bauhaus Photo and Poster paper are sourced from a European company who are committed towards sustainable practices with disposal and recycling waste materials and are made from FSC® certified fibres or cotton (Smooth, Etching and Silk). After use, if unprinted the Bauhaus Poster paper can be recycled as per normal office paper waste. If stock is printed on, recycling can occur depending on recyclability of the inks used to print and local recycling regulations.

How can Bauhaus Photo and Poster Paper be disposed of to close the Sustainability Loop?

Printed and/or unprinted Bauhaus Photo papers with a polyethylene coating (resin coated) may be recyclable – check with your local recycling company, our unprinted Bauhaus Poster papers without polyethylene (non-resin coated) are recyclable. For printed Bauhaus Poster paper check with your local recycling company regarding the compatibility of the ink for their recycling process.

FIBER BASED

Bauhaus Styline New York



Spicer’s Bauhaus STYLine® NewYork Sticky Wallpaper offers designers, decorators and marketing companies a true (and superior) alternative to common Synthetic (Polyester) Fabric removable 'wallpapers'.

Better environmental credentials: ~85% less Polyester (FSC® certified paper fibres used instead) compared to PhotoTex™ type products.

Better installation properties: Installation is improved as Spicer’s Bauhaus STYLine® NewYork Sticky is less likely to fold on itself and it has a tacky easy remove/repositionable adhesive with excellent block-out properties. Better print properties: With a best-in-class colour receiver layer that is optimised for Solvent, Latex and UV inks, colour gamut is improved and colours are more vivid and fine details are sharper.

More luxurious look and feel: Spicer’s Bauhaus STYLine® NewYork Sticky has a true look and feel of a traditional, high quality non-woven wallpaper.

Features and Applications

- Best-in-Class colour receiver layer enabling vibrant colours and sharp details with solvent, latex and UV inks
- Improved media structure to reduce the chance of the media folding on itself for easier installation
- Easy-apply repositionable adhesive
- Luxurious look and feel of a true nonwoven wall paper
- ~85% less synthetic material compared to PhotoTex™ type products (FSC® certified paper fibres used instead)
- Free of harmful substances - Oeko-TEX certified
- Specifically developed for digital printing applications with a homogenous distribution of fibres
- Superior smudge and water-resistance for better resistance to cleaning
- Excellent opacity
- Home decoration
- Shop fit-outs
- Point of sale advertising
- Posters

Oeko-TEX certified

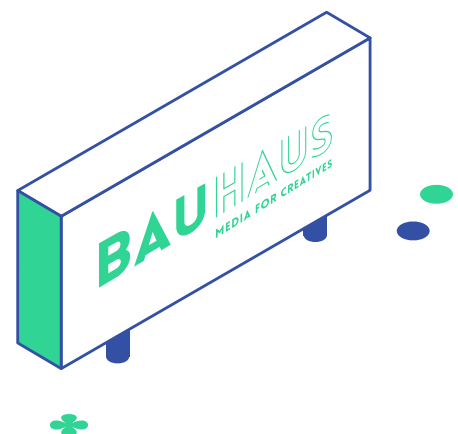
If a textile article carries the STANDARD 100 label, you can be certain that every component of this article, i.e. every thread, button and other accessories, has been tested for harmful substances and that the article therefore is harmless for human health. The test is conducted by our independent OEKO-TEX® partner institutes on the basis of our extensive OEKO-TEX® criteria catalog. In the test they take into account numerous regulated and non-regulated substances, which may be harmful to human health. In many cases the limit values for the STANDARD 100 go beyond national and international requirements. The criteria catalog is updated at least once a year and expanded with new scientific knowledge or statutory requirements. It is not easy for manufacturers and customers to keep an overview of the legal situation concerning harmful substances every day. Our experts from the OEKO-TEX® institutes do this for you.

How is Bauhaus Styline New York sustainable?

Made from ~85% FSC® certified paper fibres, Spicer’s Bauhaus STYLine® NewYork Sticky is a more sustainable alternative to synthetic alternatives.

How can Bauhaus Styline New York be disposed of to close the Sustainability Loop?

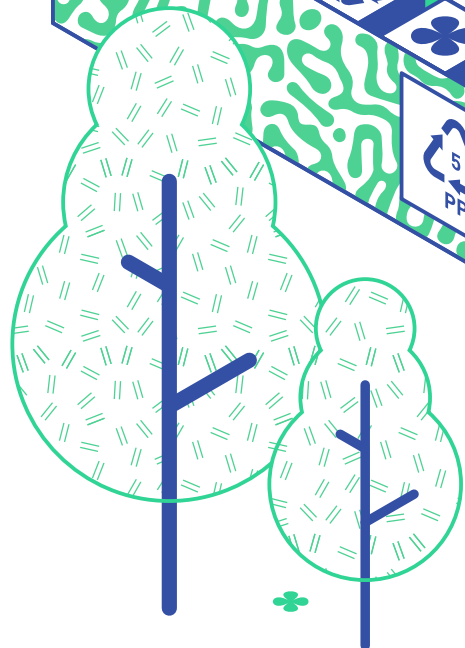
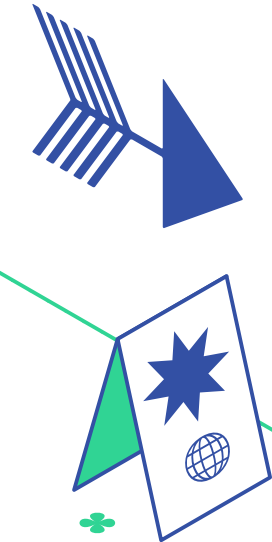
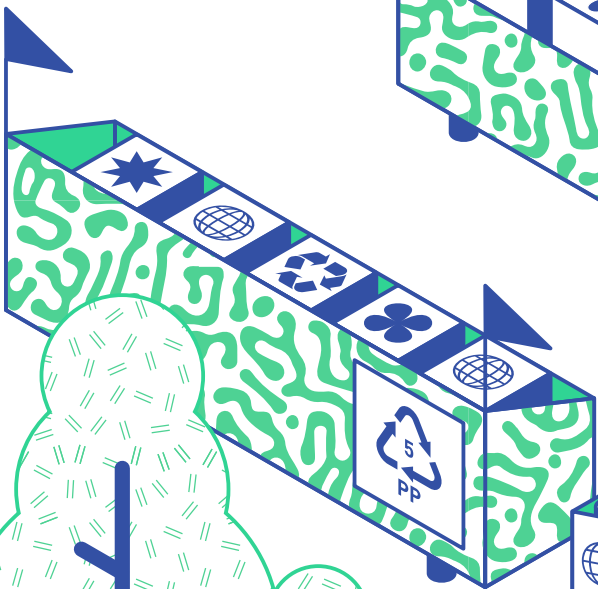
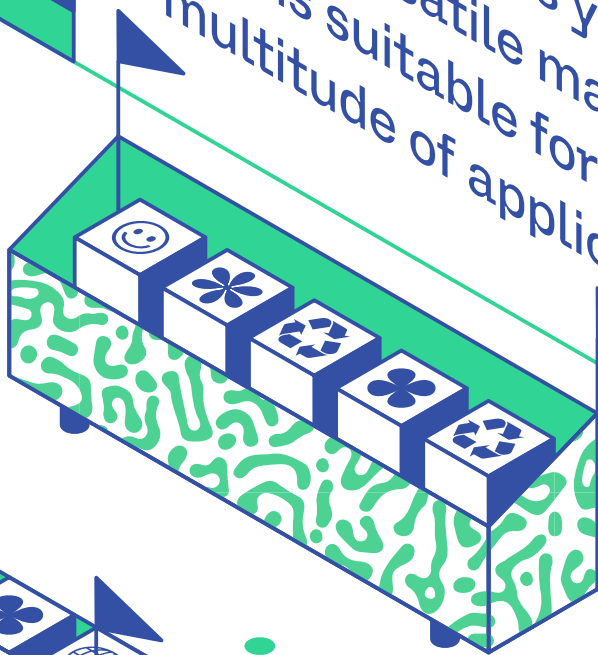
Whilst non-woven papers are currently not recyclable - they have ~85% less synthetic fibres than 100% polyester 'wallpapers'.





Polypropylene

Our polypropylene rigids offering provides you with a versatile material that is suitable for a multitude of applications.





POLYPROPYLENE

Corflute



An all weather signage and packaging substrate, Corflute® (Multicor™ and Supercor™) is a tough, lightweight, economical and long lasting twin-wall fluted polypropylene. Available in white, yellow & black. Australian made ridged Corflute® sheet, is made from virgin polypropylene for premium graphic printing, whilst being 100% recyclable.

Features and Applications

- High quality
- Hi-white, twin wall, fluted polypropylene (PP) sheet
- Corona treated for printing
- Light weight, strong and durable
- Impact & water resistant
- 100% recyclable - ask us about the Corflute recycling program
- UV Stabilised
- Fast turn around for custom sizes
- Manufactured in Australia
- Flame retardant grades available on application
- Flutes run parallel to the width measurement
- Offers consistent print surface with 44 Dyne (min.) for superior ink adhesion
- Digital version is a precise, cut to size sheet ready for digital printing

How is Corflute sustainable?

At Corex Plastics we actively exploit the ability of products made from thermoplastic to be reprocessed at the end of their life into another useful product. We have our own internal shredding, granulating & polymer reprocessing facility and partner with key polymer re-processors to gain continuity of supply with quality and commercially effective reclaimed polymer. Re-processing thermoplastics makes good commercial sense, community sense and environmental sense for Corex Plastics. In fact effective management of thermoplastic reclaim is very much the way we operate.

Environment and sustainability:

- We acknowledge that much of our manufacturing inputs come from non-renewable sources and our product, process design and strategic direction aim to continuously improve the efficiency of how we use these resources. This includes considering materials selected for extrusion & fabrication, their ability to be recovered into future products (ideally with Corex) and the future availability of the resource in addition to how we can help make a positive impact for our clients.
- The growing bio-polymers & bio-degradable polymer segment are on our radar screen and are an area we expect to be operating in over the coming years.
- Operationally we have ongoing programs and projects to reduce energy, packaging, freight, emissions and waste we use or produce. Besides being better for our staff and the community this makes good business sense.
- Staff at Corex Plastics engage with many sustainability advocates & stakeholders to gain knowledge and provide better outcomes for our business and the community through undertaking focussed and results based initiatives.

How can Corflute be disposed of to close the Sustainability Loop?

When your Corflute® products are ready to retire or if you have post-industrial waste you want to return, Corex can recycle and reuse them.

Every sheet of Corflute® is invited to be brought back. We supply industrial size recycling bins called Corpaks® to our clients and partners.

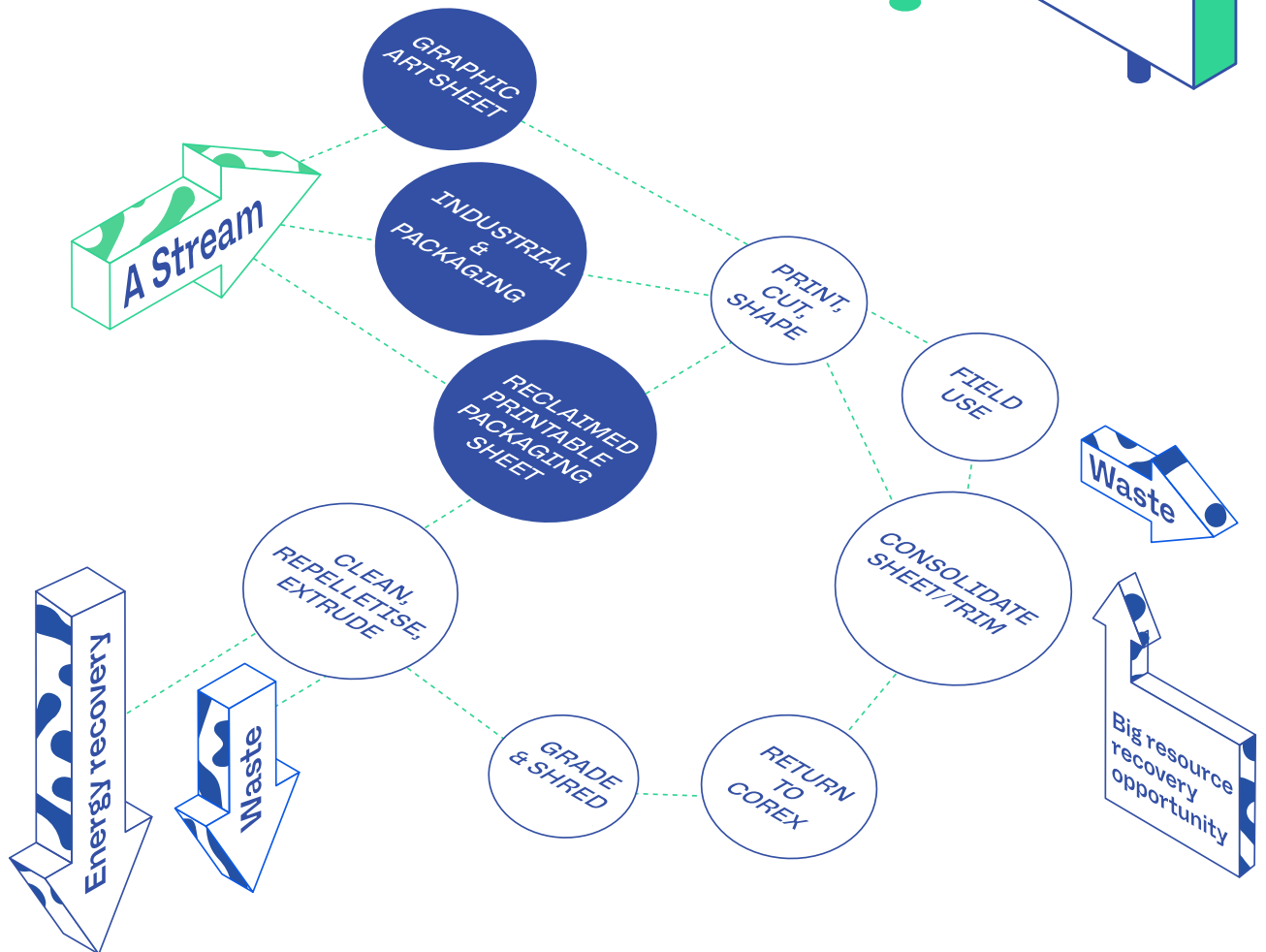
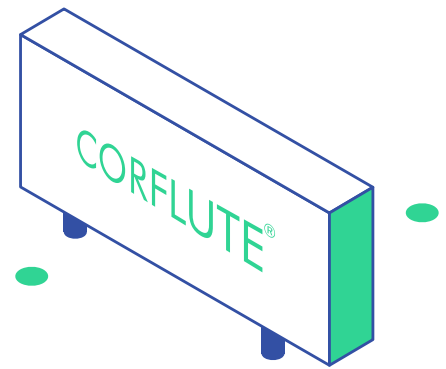
What happens to the Corflute® that's brought back to Corex Recycling?

We process and recycle every kilogram of plastic we receive on site. That means that we do not export anything! All of the processed material returned to us has a use within Corex Plastics.

What's the cost to you?

There is no charge for processing and recycling compatible plastic delivered to our site.

Corex Cradle to Cradle Practice



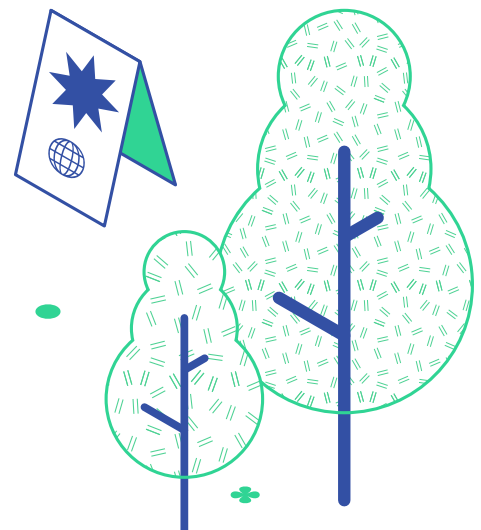
What's the difference between Corflute® and 100% Recycled Corflute®?

Corflute® is an Australian made polypropylene sheet that is defined by its unique twin wall design, making it lightweight whilst being durable and ridged.

Corflute® is made using virgin polypropylene co-polymer (PP). It comes in a range of stock colours including white, yellow and black. Custom sheet colours can be created subject to volume.

'100% Recycled Corflute' as the name suggests, is made from recycled post-industrial waste. This sheet usually has an off-white look with a very subtle speckle due to its recycled content. All other mechanical and printing attributes remain the same as Corflute®.

Both Corflute® and 100% Recycled Corflute® are 100% recyclable.



POLYPROPYLENE

Encore 100% Recycled Corflute



Encore 100% Recycled Fluteboard® has been designed for general packaging, mounting and industrial print applications. Made from 100% post industrial Polypropylene. Corex have taken a holistic view on recycling and have engaged it's major clients in a recycling program. The program encourages clients to work together with Corex to return Fluteboard® and Corflute® materials for reuse. With our purpose built recycling facility, returned sheet in the form of retired packaging, printed signage and off cuts are all recycled and re processed into the 100% Recycled Fluteboard®, embracing the "cradle to cradle" principles of sustainability.

Features and Applications

- Recycling in an efficient manner
- Maximising a limited resource
- Reducing CO₂ emissions
- Reducing landfill
- Packaging products
- Fabrication
- Screen & Digital Printing
- POS Display
- Signage

How is Encore 100% Recycled Corflute Sustainable?

- We acknowledge that much of our manufacturing inputs come from non-renewable sources and our product, process design and strategic direction aim to continuously improve the efficiency of how we use these resources. This includes considering materials selected for extrusion & fabrication, their ability to be recovered into future products (ideally with Corex) and the future availability of the resource in addition to how we can help make a positive impact for our clients.
- The growing bio-polymers & bio-degradable polymer segment are on our radar screen and are an area we expect to be operating in over the coming years.
- Operationally we have ongoing programs and projects to reduce energy, packaging, freight, emissions and waste we use or produce. Besides being better for our staff and the community this makes good business sense.
- Staff at Corex Plastics engage with many sustainability advocates & stakeholders to gain knowledge and provide better outcomes for our business and the community through undertaking focussed and results based initiatives.

How can Encore 100% Recycled Corflute be disposed of to close the Sustainability Loop?

When your Fluteboard® products are ready to retire or if you have post-industrial waste you want to return, Corex can recycle and reuse them.

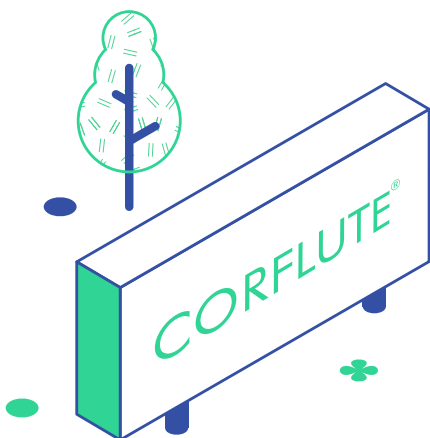
Every sheet of Fluteboard® is invited to be brought back. We supply industrial size recycling bins called Corpaks® to our clients.

What happens to the Fluteboard® that's brought back to Corex Recycling?

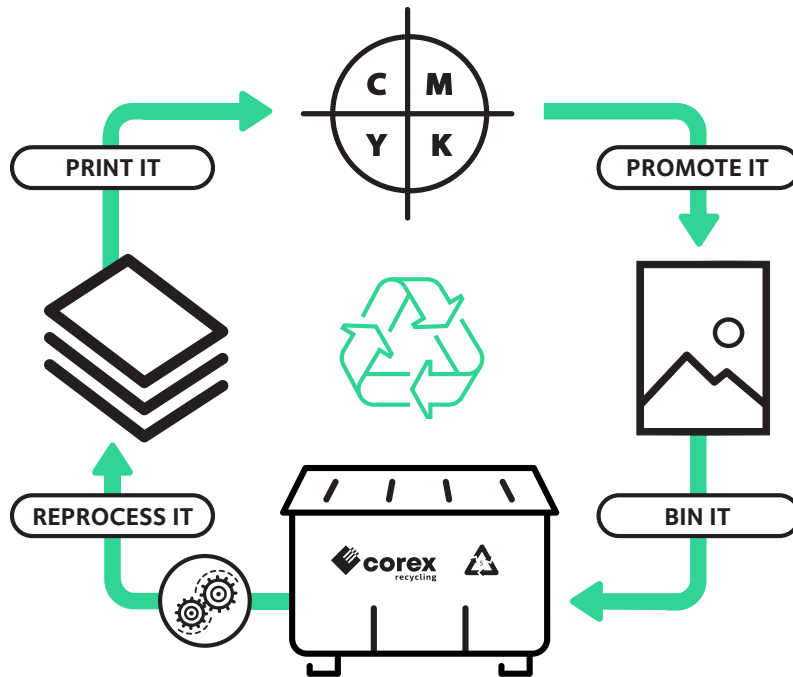
We process and recycle every kilogram of plastic we receive on site. That means that we do not export anything! All of the processed material returned to us has a use within Corex Plastics.

What's the cost to you?

There is no charge for processing and recycling compatible plastic delivered to our site.



The Corex Enviro-Range Lifecycle

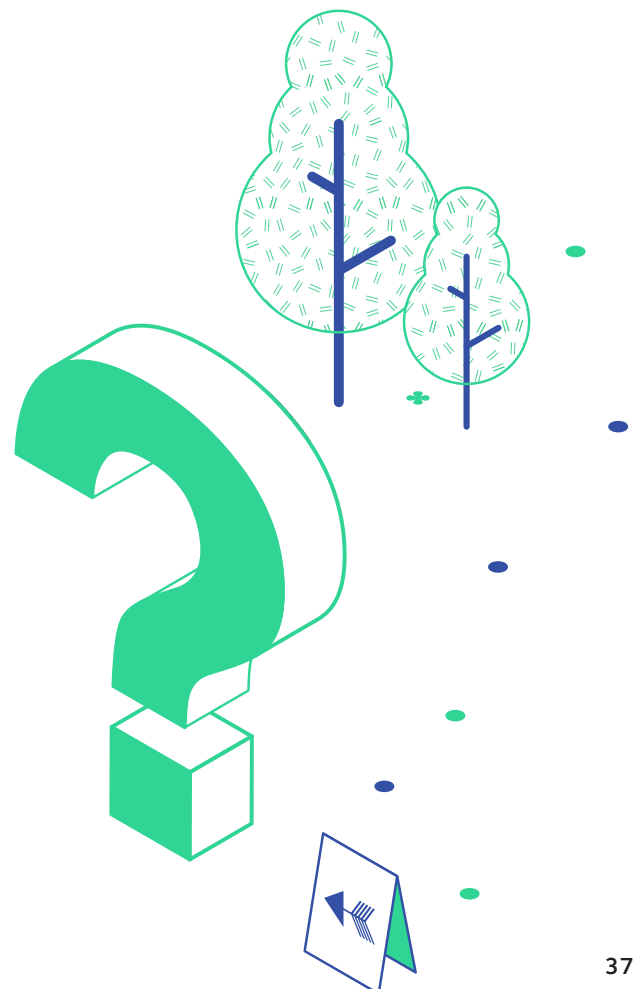


Did you know?

5 tons of Recycled PP relates to:

- * Landfill saving = 9m³
- * CO₂ savings = 3tons
- * Energy saved = 211 gigajoules
- * Households powered for 1 year = 10 hours
- * Cars permanently removed from the road = 1

Data source: Department of Environment and Climate Change



POLYPROPYLENE

Promeg



Promeg Digital is an extruded polypropylene wide format sheet, incorporating a high cosmetic finish and high standards of mechanical and environmental integrity. Its superior digital printing and production capabilities make it the perfect sheet for your next job.

Promeg Digital has been specifically formulated for wide format digital printing. While predominantly used for signage, both interior and exterior, its applications have now extended to architecture, publishing, advertising, sculpture, packaging and retail POS displays.

Features and Applications

- Superior ink adhesion and lay flat qualities
- Can be printed both sides, hinged, folded, creased, die-cut and curved.
- 100% recyclable
- Completely non-toxic
- Small carbon footprint
- Signage - Exterior, interior, backlit, safety
- Retail - POS, counter unit, dump ins, floor stands, hangsells
- Packaging - Consumer, promotional, retail, medical
- Stationery - Binders, carry cases, dividers, folders
- Architecture - Public spaces, sculptural, shop fit-outs
- Horticulture - Covers for tubs & pots, root barriers, tree guards

How is Promeg sustainable?

Promeg polypropylene sheet by Megara is made right here in Melbourne. During the manufacturing process there is no waste. Any scrap material that is produced during production is recycled on-site in Megara's bespoke recycling plant. Megara use this recycled material to make the Promeg ecorange, which is all 50-100% recycled and 100% carbon neutral. Promeg sheets can be recycled many times, and it's just as good as the new stuff!

How do we make Promeg Carbon Neutral?

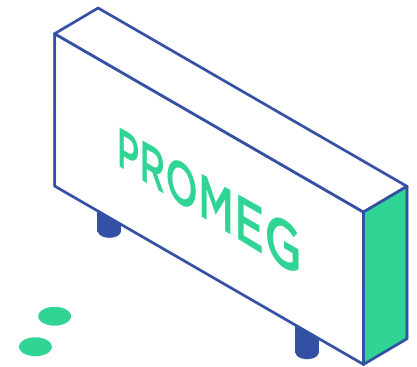
Megara work with The Carbon Reduction Institute (www.noco2.com.au) by purchasing carbon credits to help create a sustainable future. These credits go towards lots of projects – currently credits are helping to build wind farms. Megara are proud of their carbon neutral certification – #CN172. It is recognition that by sourcing materials in a sustainable way, recycling all of their own waste, and supplying products like Ecorange that Megara play an active part in building a sustainable future.

How do Megara involve customers?

Using Promeg for a product is choosing a more sustainable option. Megara not only recycle its own offcuts on-site, but they also recycle products from customers that have reached the end of their useful lives; be it that the promotion has ended, the branding has changed, or the product is just no longer needed. Some of the companies and organisations that have returned their Promeg products to Megara for recycling include Virgin Australia, Country Road, Kathmandu, Snooza Pet Products and the Victorian Government.

How can you be a part of it?

By choosing to make your next product out of Promeg of course! Megara have lots of options to up the ante too. Choose something that is 50 or 100% recycled, talk to your Spicers representative about carbon neutral material and make sure that you return any unused or end-of-life Promeg products to Megara for recycling.



How can Promeg be disposed of to close the Sustainability Loop?

Megara has its own purpose-built recycling facility right here in Australia. Megara recycle all post-industrial waste to produce Ecorange, the only Australian-made plastic sheet that is up to 100% recycled and 100% recyclable. Megara's Ecorange is also the world's first certified 100% carbon neutral plastic sheet. Promeg is made from propylene gas, a by-product of petroleum refining that would normally be burned off. This process takes a carbon-emitting resource and transforms it into an inert product that is stable and strong. Producing Promeg is low energy, consumes few resources, and produces very little waste outside of itself.

Recycling Promeg is also a simple and efficient process — using up to 100% of the original product, while retaining the same strength and characteristics as its predecessor. It can be recycled numerous times, making it one of the easiest printable materials to use sustainably.

Did you know?

- * Replacing 1kg of virgin PP with 1kg of ecorange® PP reduces CO₂ emissions by 97%
- * According to Plastic and Chemical Industries Association (PACIA), plastics manufacturing uses 2.7% of the total energy consumed in Australia, but contributes only 1.4% of carbon emissions¹.
- * All raw materials used in PROMEG® are actually food grade and comply with Australian Standard 2070–1999, unlike PVC, PROMEG® contains no halogenated compounds, chlorine (vinyl chlorine is a known carcinogen²) or phthalates (endocrine disruptors, used primarily as softening agents).

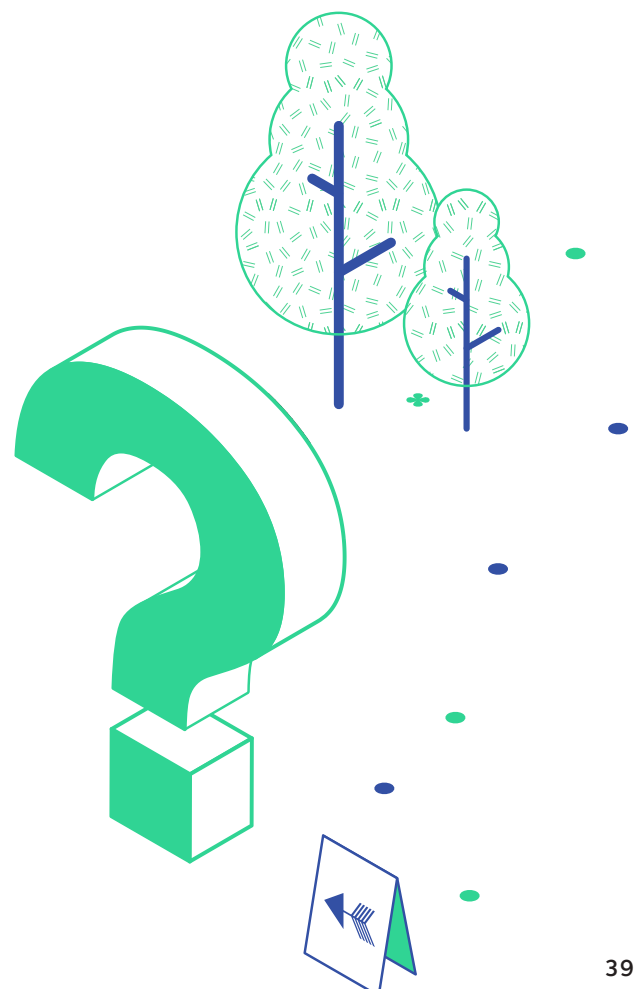
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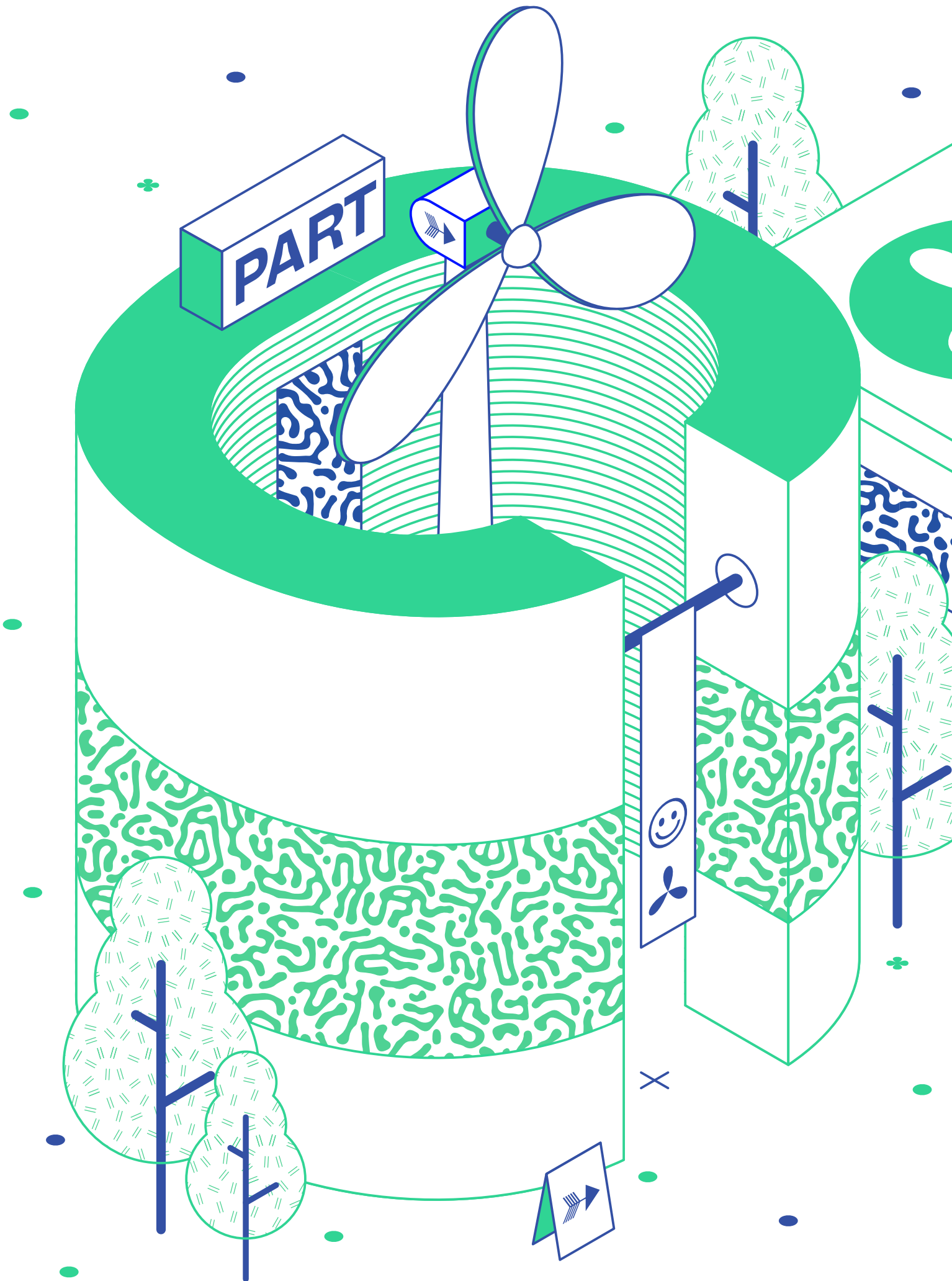
1. As cited in <http://www.kesab.asn.au/uploads/File/Fact%20Sheets%20-%20Plastics.htm>
2. <http://archive.greenpeace.org/toxics/pvcdatabase/bad.html>

Safer, Greener, Tougher.

Being one of the most sustainable products on the market makes Promeg polypropylene a perfect replacement for paper or PVC based products.

Promeg is food grade — which means it is completely toxin-free, with no nasty additives or heavy metals used at any stage in its production. It is so safe that babies can chew on it. Promeg is light-weight and has exceptional strength and durability, rarely needing to be replaced — resulting in lower whole-of-life costs, both environmentally and financially. It also encourages re-use, the most effective way to reduce our environmental footprint.



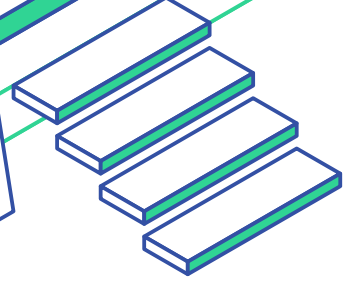
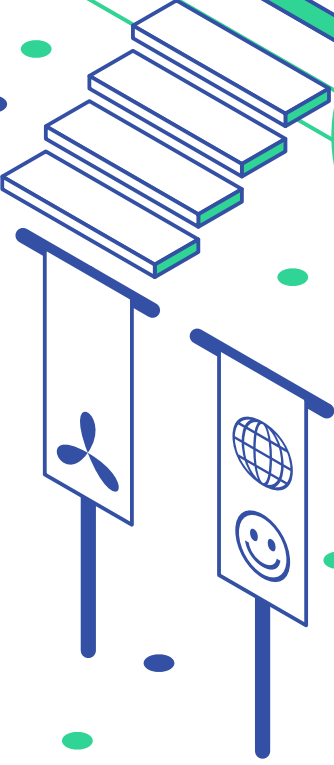
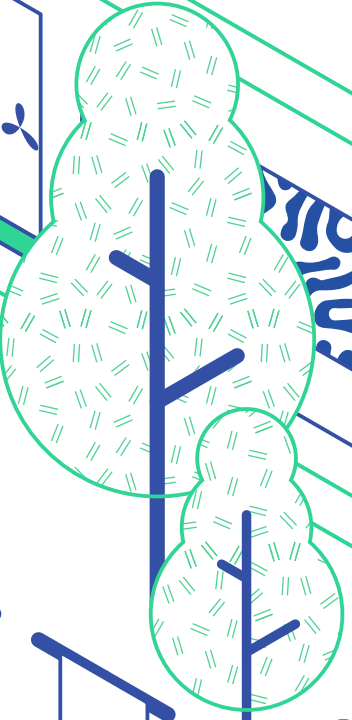
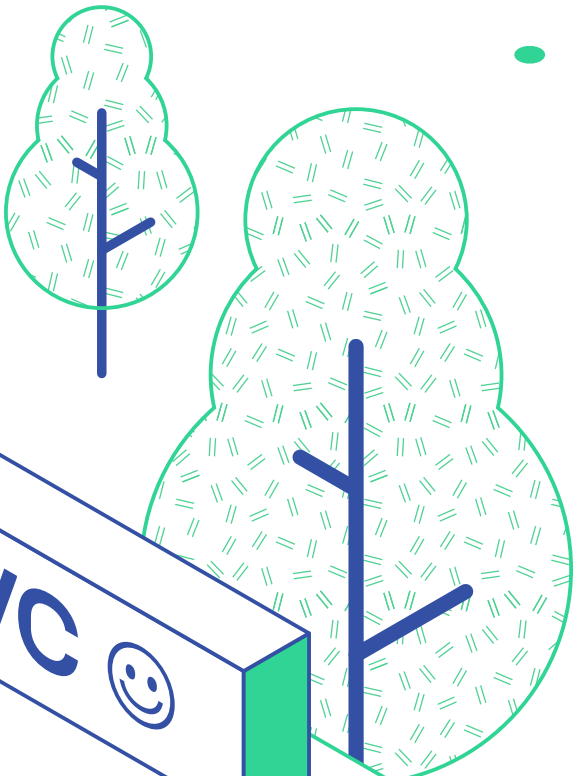




Non PVC



The Non PVC Vinyl range offers a greener solution to meet the growing interest and demands in the market.



NON PVC

3M Envision



3M Envision™ is the world's first non-PVC high performance film, offering a greener solution to meet the growing interest and demands in the market.

The revolutionary new 3M Envision wrap film series is available in two options ensuring compatibility with both solvent and latex printing. This versatile premium film combines excellent print quality with ease of application designed for indoor and outdoor use, signs, walls, windows, floors and partial vehicle graphics.

The 3M Envision range includes the non-PVC Overlaminates wraps, in gloss and lustre finish for enhanced scratch resistance and UV Protection.

Features and Applications

- Non-PVC
- Suitable for UV, Latex and Solvent printing
- Quick, easy time saving installation due to the 3M™ Comply™ Adhesive with air release channels
- Durable overlamine with enhanced scratch resistance and UV Protection
- Ideal for interior and exterior applications, partial vehicle graphics on flat or simple curved areas, walls, glass, door and floor graphics, building windows and dividers, general signage, and POS displays
- Fire rating BCA GRP1 AS/NZS3837:1998

How is the 3M Envision range sustainable?

The revolutionary new 3M Envision wrap film series was designed to adapt to the evolving customer needs by supplying a greener solution.

Providing a non-PVC portfolio range, customers have the power to align their business with customers' sustainability initiatives and offer an eco-friendlier graphic solution.

3M Envision Films are Non-PVC, Phthalate-free, made in part with bio-based materials**, manufactured using 58% less solvent and made without chlorine or other halogens added.

The 3M Envision Film range continues to provide high-performance technology with a sustainability edge.

***Applicable to 3M Envision Wrap Films*

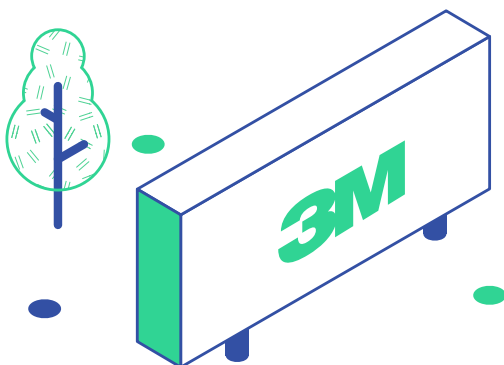
What is the Greenguard certification?

The UL Greenguard Gold Certification represents products that meet the criteria for low VOC emission levels suitable for environments such as educational and healthcare facilities.

For further information on the criteria and certification testing please visit : www.ul.com/services/greenguard-certification

How can 3M Envision be disposed of to close the Sustainability Loop?

Disposed the same method as other 3M digital print film which fall under the "General Solid Waste (non-putrescible)" category.



Conformable and durable Non-PVC Wrap Films

3M Envision™ Print Wrap Film SV480mC

- Designed for solvent/eco-solvent and UV printers.

3M Envision™ Print Wrap Film LX480mC

- Designed for latex and UV printers.

3M Envision™ Gloss Wrap Overlamine 8548G

- Provides exceptional gloss and clarity.

3M Envision™ Luster Wrap Overlamine 8549L

- The ONLY non-PVC luster wrap overlamine on the market.

3M Envision™ Matt Wrap Overlamine 8550M

- A matt finish that minimizes glare, great for textured surfaces and wall graphics.

Also available in Versatile Non-PVC Intermediate Film

3M Envision™ Print 48C

A versatile intermediate film that combines excellent print quality with amazing ease of application and removal for graphics used as promotional media.

3M Envision™ Gloss Overlamine 8048G

Ideal for use with 3M's range of intermediate print films and has strong protection against UV rays, mild acids and scratches.

3M™ Envision™ Matt Overlamine 8050M

High-performance, matt overlamine that minimises reflection from lighting and sunshine.

The good news for graphics producers and installers is that environmental benefits can now be offered to customers without sacrificing print quality and general performance. Some of the key performance features of the latest high quality non-PVC wrap films are as follows:

1.High conformability

Increased stretch compared to typical PVC wrap films makes non-PVC wrap films particularly suitable for 3-dimensional applications, even with deep recesses or corrugations. More challenging contours can be tackled without the need for cutaways or the use of additional pieces of film. Better lifting resistance means greater customer satisfaction and reduced tedious rework.

2.Faster removal

Compared to cast vinyl which can be more brittle, non-PVC films feature greater tensile strength, so they resist tearing to a higher degree. This can dramatically improve removal times, and because no primer is needed, removal is easier, cleaner and less residue-prone.

3.Extreme durability

Good quality non-PVC films are typically inherently more durable than comparable vinyl products and provide a better guard against UV rays, high temperatures, moisture and acid dew – especially in horizontal and non-vertical applications. Browning and staining is commonly reduced.

4.Exceptional clarity

High quality non-PVC overlamines provide outstanding gloss and clarity, and better scratch resistance during installation. This creates a better impression at job-handover time with less awkward conversations asking customers to wait for squeegee marks to disappear in the sun. Installations look better from the get-go!

5.Easier installation in extreme temperatures

Compared to vinyl, non-PVC films tend to maintain their normal feel in cool weather and are more resistant to tearing. Similarly, when it's warm they don't get too soft or stretchy. Being more temperature stable, good quality non-PVC films can make jobs done in challenging temperature environments significantly easier and faster.

NON PVC

Kavalan



PVC-Free, 100% clean and boasting environmental credentials unlike any other product in the large-format printing industry before it, KAVALAN's banner range is a ground-breaking alternative to PVC that doesn't compromise on quality, vibrancy or impact. All the latest KAVALAN banner materials now hold LCA certifications, officially confirming KAVALAN's superior eco-performance over traditional PVC banner.

Features and Applications

- PVC-Free
- Perfect for Latex and UV printing
- Lightweight
- RoHS Compliant
- Ideal for interior and exterior applications, including but not limited to the following: outdoor banner, interior decoration, lightbox, POS display, sports graphics, event graphics, large scale building wraps and printed site hoardings.

How is the Kavalan Range sustainable?

PVC-FREE, 100% clean, lightweight and boasting superior environmental credentials, KAVALAN is specifically designed for responsible end-of-life-disposal, so it can be safely disposed of regardless of whether it is recycled, put into landfill or incinerated in waste-to-energy schemes. Unlike any other product in the large format printing industry before it, KAVALAN's banner range is a ground-breaking alternative to PVC banner. KAVALAN materials are revolutionising the large-format digital print industry, paving the way for meeting zero PVC targets while matching the physical qualities and appearance of traditional PVC banner materials.

With the Life Cycle Analysis (LCA) process now completed on all the latest range of KAVALAN banner materials, the results validate exactly what we already knew – KAVALAN is the environmentally superior alternative to traditional PVC banner. From its significantly lower carbon footprint and lower water consumption, to its amazing non-toxic biodegradable film, KAVALAN is light years ahead of PVC banners.

Brands have environmental targets that they must reach; all parts of the value chain have a role to play – Spicers Australia

and Taya Groups have worked hard to put sustainability and traceability at the heart of Kavalan's materials portfolio. Businesses can start by reviewing their current banner material portfolios against the sustainability guidelines and identifying opportunities to make changes – starting with Kavalan PVC-free materials is a good starting point.

Kavalan's Life Cycle Analysis (LCA)

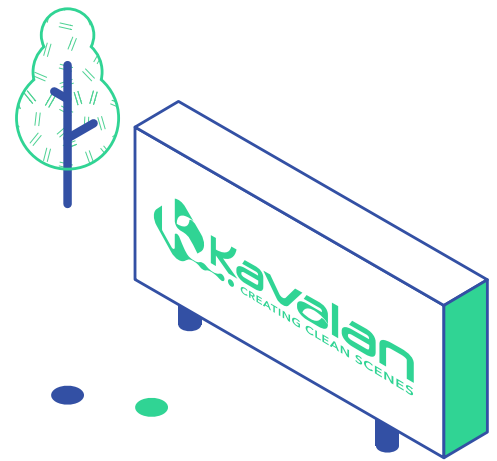
The certified LCA (Life Cycle Analysis) process forms part of the ISO 14000 series of internationally recognised standards for environmental management. It analyses the environmental impact of a product, from cradle to grave, and combines historical data, test results and scientific measurements to produce numerical analysis for various environmental impacts such as global warming, pollution, biodiversity decline, algae growth, and water consumption, among others. The LCA is perfect for providing direct environmental comparisons between products and allow customers to make purchasing decisions not based solely on product quality and cost but also its impact on the environment.

To assess these impacts the LCA process looks at the 3 stages of a product's life:

- Upstream activities such as raw material extraction, production and packaging.
- Core activities including transportation, energy and water usage, and production.
- Downstream end of life activities, include waste management and disposal.

How can the Kavalan Range be disposed of to close the Sustainability Loop?

Due to the lack of recycling capability within the banner industry and zero commercial capacity to recover or chemically recycle PVC coatings, Kavalan's main focus on disposal is to allow it to be safely disposed of in either a WTE incinerator or landfill without any of the toxic effects of disposing of PVC banner. That said, once separated from the coating, the polyester base fabric can be recycled just like any other textile in normal waste streams.



The Kavalan Eco Calculator

Kavalan introduces the world's first Eco Calculator for large-format banner materials, making it simpler than ever for businesses to evaluate and understand the eco savings of KAVALAN PVC-free banner and textiles. KAVALAN's Eco Calculator can tangibly demonstrate to your clients how it can help them with crucial environmental targets without compromising on quality.

The scientific data is based on the Life Cycle Analysis (LCA) process conducted by SGS, the world's leading testing, inspection and certification company. SGS conducted LCAs on all the latest KAVALAN products and the LCA data proves categorically that KAVALAN materials provide significant eco savings, with 12 products available for comparison with their PVC banner and textile counterparts on the Kavalan Eco Calculator.

The web-based Eco Calculator uses comparison data from five prevalent environmental impacts; global warming, water consumption, human carcinogens, PM2.5 (polluted particles), and fossil fuel scarcity. Users simply enter the KAVALAN product of their choice, their preferred unit of measurement, and the quantity, and the eco savings result is generated automatically, at which point a personalised PDF report and message is sent straight to their inbox. The Eco Calculator is currently accessible to KAVALAN distribution partners.

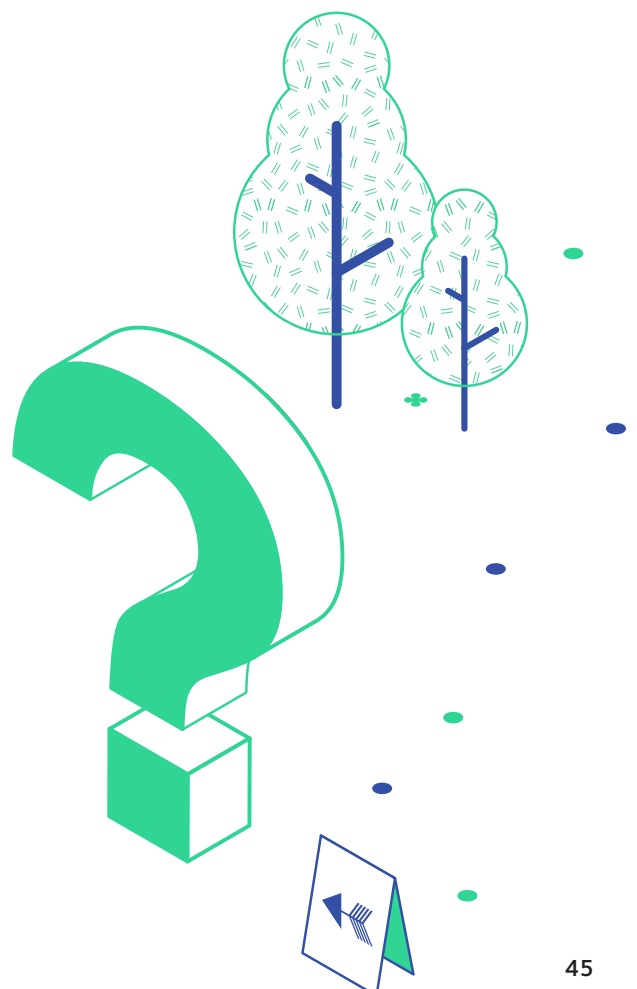
Want to make sure your materials guarantee your sustainable commitment? Get in touch with your Spicer's representative and find out more about the KAVALAN range.

Did you know?



Product benefits of switching to a non-PVC banner

- * **Upfront reduction of the planet's resources:** When compared to its PVC equivalent, a square metre of Kavalan will reduce the consumption of the planet's resources by up to 50% (in terms of coating only, this reduction is upwards of 90%). This means 50% less waste at the disposal stage.
- * Kavalan banners are up to 45% lighter than their PVC counterparts. Less waste and lower environmental impacts (and costs) for transportation and handling.
- * For each square metre of Kavalan, up to 60% is recyclable (polyester base fabric only), whereas only 30 to 35% of its PVC banner counterpart is recyclable (polyester base fabric only).
- * **Extended storage:** Because there are no phthalates (synthetic additives) in the material, rolls of Kavalan can be stored for two years plus without any detrimental effects of the material printing quality, thereby extending its storage life by up to 4 times when compared to PVC banner equivalents, which typically start to deteriorate after 6 months in storage.





*Get to know sign & display
industry terms and
definitions.*



3M™ ENVISION™ FILMS

3M brand name for products that deliver leading-edge technology, best-in-class performance with a sustainability edge.

AQUEOUS (INKS/COATINGS)

Water based inks and coatings widely used in the industry, replacing solvent based materials to reduce or eliminate the use of volatile organic chemicals (VOC's) from the converting process.

BIODEGRADABLE

A material or composite such that, when left alone, breaks down and is absorbed into the eco-system without compromising it. As a result, if a biodegradable product ends up in a landfill it will lack the environment required to biodegrade the product in a timely manner.

CARBON CREDIT

A generic term to assign a value to a reduction or offset of greenhouse gas emissions. A carbon credit is usually equivalent to one tonne of carbon dioxide equivalent (CO₂-e). A carbon credit can be used by a business or individual to reduce their carbon footprint by investigating in an activity that has reduced or sequestered greenhouse gases at another site.

CARBON FOOTPRINT

A measure of the environmental impact of a given process, event, product, or person measured by the amount of greenhouse gases emitted.

CHAIN OF CUSTODY

The path taken by raw materials, processed materials, finished products, and co-products from the forest to the consumer or (in the case of reclaimed/recycled materials or products containing them) from the reclamation site to the consumer, including each stage of processing, transformation, manufacturing, storage and transport where progress to the next stage of the supply chain involves a change of ownership (independent custodianship) of the materials or the product.

COHESION

Refers to the internal strength of the adhesive and the ability of the adhesive to stay together. Highly cohesive adhesives are useful in removability ensuring the adhesive stays together on removal. They can also control shrinkage levels of the top sheet by holding the vinyl in place.

COMPOSTABLE

Products that are biodegradable, but also release nutrients into the soil. These products need to be composted in an industrial composting facility and typically take several months to breakdown.

ECO CALCULATOR

An Eco Calculator incorporates a pre-defined set of materials and processes. It also allows the user to enter own data, generating a more precise result for individual composite producers. A report in pdf-format can be generated that summarises the impact of the composite product under study.

ECO-FRIENDLY

Environmentally minded actions that cause minimal harm to the earth.

FULLY RECYCLABLE (KERBSIDE)

Fully Recyclable kerbside is packaging which can be placed into your home recycling bin as it is. Recycling diverts materials from the landfill waste stream to material recovery. Unlike reuse, which involves using a returned product in its original form, recycling involves reprocessing material into new products.

GREENHOUSE GAS

Any gas that absorbs thermal infrared radiation in the atmosphere. This includes gases such as water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbons (CFCs), hydro chlorofluorocarbons (HCFCs), ozone (O₃), hydro fluorocarbons (HFCs), per fluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

LIFE CYCLE ASSESSMENT

The method of evaluating a product's total environmental impact from raw materials through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. Often described as cradle-to-grave.

MONOMERIC PVC

In order to make PVC soft, additives called plasticizers are added. Monomeric refers to the type of plasticizer. Monomeric ("mono" meaning one) are single molecules. Because of their singular nature they tend to be more unstable and migrate out of the film more readily than polymeric plasticizers causing a faster deterioration of the film. As such monomeric PVCs are usually shorter to intermediate term films.

POLYMERIC PVC

In order to make PVC soft, additives called plasticizers are added. Polymeric refers to the type of plasticizer. Polymeric ("poly" meaning many) are linked molecular chains. Because they are linked they tend to offer more stable and durable PVC constructions. Polymeric films are more intermediate to high grade films.

POSITIONABLE OR REPOSITIONABLE ADHESIVE

Light finger pressure may be used to tack the film in place to check for proper positioning and then repositioned if necessary. Film pressure applied by any means, as well as high application temperature or removing and trying to reapply any liner, eliminates this feature.

POST CONSUMER WASTE

A product that has been used by the consumer and has entered the waste stream.

PRE CONSUMER WASTE

Waste that was generated in the manufacturing process (trim, startup material, etc) and then reintroduced into the manufacturing process.

RECYCLED CONTENT

Post consumer, pre-consumer waste, or both used in a product.

Glossary

RECYCLED FIBRE CLASSIFICATION

Mill Broke: Waste that has not left the mill.

Pre-consumer fibre: Waste that has left the mill but not reached the consumer, typically from the printer or converter.

Post-consumer fibre: Post-consumer waste, collected from homes, offices etc.

Post-consumer mechanical fibre: Post-consumer waste, typically newspapers.

To be classified as recycled the grade should contain no less than 50% of the total fibre from any combination of the above sources with the percentages given for each.

RECYCLING

The treatment or processing of waste materials to make them suitable for reuse in the same or another application, thereby reducing the waste stream.

REMOVABLE ADHESIVE

The industry definition of removable is an adhesive that when removed will leave less than 30% glue residue however good quality removable adhesives can leave no to minimal glue.

RENEWABLE RESOURCES

Sources of energy or materials that are replaced by natural processes at a rate comparable or faster than their rate of consumption by humans.

SAV

Self-Adhesive Vinyl is a pressure-sensitive adhesive made with vinyl polymer and a meth acrylic polymer. The material can be used in digital printing to create vibrant designs and images, and readily absorbs certain types of ink. Self-adhesive vinyl sheets can be cut into almost any shape and size.

SEMI PERMANENT ADHESIVE

Offer adhesion values between removable and permanent and are ideal for applications requiring more adhesive strength but also removability characteristics.

SUBSTRATE

The surface to which graphics are applied. Can be plastics, metals, vinyls, banners, fabrics, papers, glass and many more.

SURFACE ENERGY

All substrates have a surface energy value. These are measured in dynes. The lower the dyne value the more difficult it is for an adhesive to stick.

TACK

Refers to the initial bonding of an adhesive to the substrate (High tack, Low Tack). Tack is not necessarily an indication of long term adhesion. i.e. an adhesive can be low tack initially to make application easier, then increase in value over time to give strong bonding during the life of the graphic.

UV RESISTANCE

Ability to withstand decay due to the damaging effect of the ultraviolet rays of the sun.

UV PRINTING

Printing with ultraviolet inks.

VIRGIN FIBERS

Using virgin fibers (wood fibers) to produce graphic paperboard means using a natural raw material. Virgin fibers are by nature strong and elastic. They are also pure and of known origin. All virgin fibers share some natural properties to a greater or lesser degree, and there are also other specific properties associated with fibers of particular wood species.

WASTE COLLECTION

Waste collection is the collection and transport of waste to the place of treatment or discharge by municipal services or similar institutions, or by public or private corporations, specialised enterprises or general government.

ZERO CARBON

A term sometimes used to describe a product or service that creates no CO₂ or greenhouse gas emissions during production and/or operation.

ZERO WASTE

A target of sending no waste for disposal via landfill or burning.

Notes

A large grid of small dots, intended for taking notes. The grid consists of approximately 25 columns and 40 rows of dots, covering most of the page area below the title.

Notes

A large grid of small dots, intended for taking notes. The grid consists of approximately 30 columns and 40 rows of dots, providing a structured space for writing.



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Printed on HP Kraft 265gsm/445ums Cover
Precision Laser 110gsm Text
March 2022

