

# MIRRI TECHNICAL PRINTING & FINISHING GUIDE

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## This is Mirri

Mirri is a world-renowned metallic material that can be applied to almost any substrate. It's been innovating within the industry since 1987.

Mirri is the brainchild of Celloglas, one of the UK's leading print finishers.

Supplied to distributors and luxury brands around the world, Mirri is recognised for its premium qualities and is proven to elevate brand perception and deliver better retail experiences. Manufactured using exceptionally high-quality film, this range of highly reflective materials can be mounted to virtually any substrate and it can be printed on too.

Read on to discover the extensive benefits that go hand in hand with Mirri.

## Large Sheet Size

Mirri can be adhered to almost any surface allowing for noholds- barred creativity. From small-scale products to large format point of sale displays, Mirri has it covered.

Never before has it been possible to use reflective material at such huge sizes - until now. Mirri is available in up to 3.2-metre lengths, making it ideal for bold, large-scale point of sale or window displays to stop potential customers in their tracks.

## An Extensive Product Range

From the mirrored aesthetic of Mirri H gold and silver to the soft touch of Mirri Silk and the mesmerising finish of Mirri Holographic, this huge selection of products can be used in many applications and for various purposes.

### **Reflect your brand's true colours**

Harness the power of Mirri – produce eye-catching finishes from an infinite combination of colours and techniques. Choose from a range of vibrantly coloured films to beautifully turn any vision into packaging that has the wow factor. However, you're open to endless possibilities when using silver and overprinting, which results in stunning design elements.

Choose any Color-Logic certified colour to match a brand palette, underpin select areas of a design to make it opaque or employ finishes like foiling or varnishing for striking effects.

## Work with Images

Thanks to Mirri's flexibility, you can illustrate your messaging to stunning effect.

Illustrate your messaging to stunning effect. Simply printing images as you would on to a regular white sheet usually results in a soft, misty sheen. But use a white layer to underpin the CMYK or Pantone colours and you can ensure images are kept vibrant for intense impact.

The white underpin suppresses the metallic shine of Mirri and enables it to 'play' more like regular ink on paper. Take care not to underpin the whole area with white as this can compromise Mirri's signature shine.

Produce a high-contrast monotone version of the image you're working with and use it create a section of white ink that relates to the CMYK image that's eventually overprinted on to the white.

Alternatively, inverse the white image for interesting and creative results. Take it one step further and rather than opting for the one-size-fits-all approach of a quick greyscale and monotone white underpin, pick out select areas required to be more metallic than others and create some real depth of field.

## Environmental Considerations

Mirri is committed to conducting its business in compliance with all relevant environmental laws and regulations. Many Mirri materials are available with FSC or PEFC accreditation, while all our manufacturing and office operations actively promote environmental best practice.

Mirri Eco AG has been specifically developed to enable brands and retailers to limit their environmental footprint without compromising on quality or aesthetics.

This biodegradable metallic board is manufactured from renewable wood pulp sourced from managed plantations.

## Technical Printing & Finishing Guide

Mirri is made by laminating a moisture and temperature stable film to one side of paper, card or board. Most films are polyester based and some have a print receptive coating, however the following tips will apply irrespective of the Mirri substrate chosen.

## UV Litho

Minimise waste - we suggest you 'make ready' on plain white material of a similar grammage.

Always handle the stocks with care to avoid scratching / scuffing.

To avoid damage to the surface of the film - turn off all joggers in the delivery unit.

Turn off all static bars to avoid gaining extra static in the sheets.

When printing use plastic inks where possible to avoid the inks scratching. If printing on both sides of the sheet - print mirri side first. The reverse of most of our products are lick coated and will print as well as any similar material.

Always take care not to scratch the face side when printing on the reverse.

Turn all air settings down as low as possible when printing on the reverse side. If using double-sided Mirri stock keep settings low for both passes. Also be aware when printing, heat must be reduced to prevent blocking as the film retains heat.

When printing 4 colour it is possible to replicate paper by printing a white opaque under the image areas, this will create a 'punchier' look by adding areas of contrast in the image.



## UV Screen

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## Conventional litho

It is important to note that when printing by conventional offset litho, inks must be selected from formulations which will dry on non-absorbent surfaces.

These ink formulations are commonly known as 'foil inks' or 'Fully Oxidising Inks' and will dry solely by oxidation.

Your ink supplier will be aware of these types of ink and should be able to recommend the correct range of inks to use. (Good results have been obtained in the past using 'Oxy Dry Plus' from Stehlin Hostag or 'Polybond' from Sun Chemicals) - though we recommend that you conduct tests if in any doubt - we will be happy to supply samples to your ink supplier on request.

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Keep stacks as low as possible to avoid set off. Allow at least 48 hours for drying.

## Digital printing

**Developments in digital printing technology in recent years have been vast, the range of digital print technologies now available is huge, from document printing through to large format such as the Inca Spyder 320, a UV flatbed printer. We recommend if you are printing digitally on Mirri to run a test on the machine first, or consult your technical support for the digital machine. Also check with the Mirri support team for technical advice. We have tested Mirri on a limited number of digital machines and these tests are ongoing, after each test a report is written giving guidance on how to print on that particular machine.**

### **HP Indigo**

We have completed a number of trials on HP Indigo machines and there are a number of case studies in the news section of commercial jobs that have since been printed on a HP Indigo press. We are continuing to research methods for HP Indigo printing on Mirri and we currently recommend Sapphire coating material before printing. If you gloss laminate over the print, this brings back the glossy shine of the material.

HP Indigo offer an extended colour selection upgrade, which allows the printer to print white, along with other colours. White can be used when printing on Mirri to block out the metallic effect and create areas of contrast.

Please feel free to ask any questions about HP Indigo printing and look out for updates in our news section.

# Finishing

## **Foil Blocking**

Foil blocking can add that extra contrast in both metallic and pigment foils. For best results use foils suitable for plastics or PET, when foiling on flat beds try to avoid large solid areas as you can get 'Gassing' or pin holing. Ask your foil supplier for the best grade to use. All Mirri materials are fully foil blockable.

## **Embossing & Debossing**

Due to the laminated film layer, Mirri is ideal for embossing or debossing.

## **Additional coatings**

Mirri is fully compatible with laminating, spot UV, overall UV and water based coatings.

## **Cutting and Creasing**

Mirri is very easy to cut and crease, make sure blades are sharp and straight to avoid film pull off or flick back. Use a deeper wider crease to avoid rebound.

## **Gluing**

Use high tack adhesive to achieve a better plastic to substrate bond.

It is recommended to kiss cut or cut through the film to allow the adhesive to penetrate to the substrate when cut and creasing, this will allow a better bond.