# MIRRI TECHNICAL PRINTING & FINISHING GUIDE

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# Technical printing & finishing guide

Mirri is made by laminating a moisture and temperature stable film to one side of a 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.



www.mirri.co.uk

### **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 oxidisation.

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.

