

Guidelines for Foil Blocking

Guidelines to consider which will help produce consistent results when print is to be foil blocked.

Foil Blocking

These finishes can provide the ultimate in decorative appeal. They are not limited to gold and silver foils, but extend to an impressive range of pigmented, holographic and security foils.

All of these can be combined with embossed images to produce varying tactile effects – any one of which will enhance the printed message and provide shelf appeal for greetings cards, cartons, magazine covers, brochures etc.

Security Foils

These foils are primarily used to uniquely identify products and have the added benefits of deterring theft and counterfeiting. By including these foils on P.O.S materials they give the product a very distinctive high profile appearance. These foils are available “off the peg” in a number of designs or they can be made “bespoke” to your individual requirements.

Textured Foils

These foils are available in a myriad of designs or you can create your own unique image. They will give a design energy and provide an eye-catching alternative to traditional flat foil. These foils are also a cost effective alternative to security foils and they give companies the opportunity to use unique images which can be duplicated in their P.O.S material.

Embossing

Embossing gives you the opportunity to enhance your print with stunning 3-D effects. Embossing is particularly effective when used in conjunction with our other processes i.e matt lamination and spot U.V with the spot U.V image embossed out of the lamination or foilblocking and embossing.

Foil blocking and embossing - Advice for printers

Many problems can be eliminated at the design stage by forethought and correct specification of materials. Occasionally, however, some problems occur in production due to technical issues. Unfortunately these are not so easy to anticipate, control or eliminate.

If you are not sure about something, do not hesitate to seek out advice.

Foil blocking onto laminate or varnish

It is generally recommended that foil blocking and embossing is carried out prior to laminating or varnishing. Foil blocking and embossing can be processed after laminating but there is a risk of the foil not adhering to the coated surface.

Matt laminating is the exception to this rule as it can be readily foilblocked after laminating.

It is not recommended that double sided laminates or varnishes are foil blocked as the image is transferred to the underside of the sheet.

Foil blocking large areas

It is possible to foil block large areas of foil onto print that has not been laminated or varnished. We would advise that areas above A5 are proofed prior to printing.

Anti- Set off Spray

This needs to be kept to a minimum and it is recommended that a soluble spray powder is used.

Spray powder can cause an uneven surface on which to foil and on some occasions will dull the foil.

Guidelines for Foil Blocking

Inks – some general advice

Adhesion of foil to an ink can be seriously affected by the presence on the ink surface of waxes or other slip additives. These materials may come from the inks themselves or be applied to the ink surface during re-moistening of heat set web offset printed work.

All inks contain waxes or slip additives, however some have more than others and these are generally referred to as high wax inks.

The slip additives migrate to the ink surface during the drying phase of the ink. The amount that actually reaches the ink surface is largely dictated by the type and quantity added to the ink, the length of the drying time and the amount of ink applied to the paper.

Because ink drying is likely to be slower and the quantity of ink greater in four colour build areas of the sheet, this will promote migration and it is very common to find problems caused by slip additives or waxes only in these areas of the sheet. Infra Red drying of print can also promote migration.

Some foils may be difficult to apply to an ink surface with a high wax content resulting in picking off of the foil. Both problems produce, at best, a poor finish in the affected area and, at worst, an extremely obvious defect.

Recommendations

All work to be foil blocked should be printed using low wax inks or sealed with coatings that also contain low levels of slip additives. The simplest way to ensure this is to specify to your ink supplier that inks coatings or sealers be suitable for foil blocking (and to take the recommendations for their use seriously).

Print Drying

Inks are formulated to set rapidly on the paper surface and to allow work to be backed up or processed in other ways, with minimum delay.

Setting time should not be confused with drying time, which can be significantly longer. Both setting and drying times are affected not only by ink formulation but also by substrate, how the print is made and the design and layout of images.

Problems associated with prints that are not sufficiently dry at the time of processing include:

- Print set off after transport to us but before we have processed the work
- Marking of the print during processing
- Reticulation and/or poor adhesion
- Print set off after processing by us - due to re wetting of partly dry inks

All these problems tend to affect heavily printed four colour builds particularly where they are backed up by similar images and are also likely to be variable in occurrence and severity throughout the job.

In each case allowing a little extra time for the print to dry can usually avert the problem. Even when the print appears to have dried sufficiently it is possible for an effect, termed “sweat back”, to soften an ink.

This occurs when ink solvents, which would normally dissipate into the paper and then into the atmosphere, are driven back into the dried ink film causing it to soften to a point where set off can occur.

Guidelines for Foil Blocking

Recommendations

It is impossible, in any practical sense, to predict many of the problems caused by fresh, semi-dried inks and therefore preventative action is difficult.

Advice for graphic designers

The choices you make at the design stage of a printed product are crucial, not only to its final success for your client but also to its successful production in terms of cost and deadline.

In this section you'll find advice that is intended to help you avoid some of the common problems, which we see regularly, and which frequently seem to have been designed into the product.

If you specify foil blocking or embossing on a job it is more likely that the printer will send the printed sheets to a trade finishing house such as Foil Works, or one of our associate companies for processing. We might also be contacted to provide additional services such as laminating, varnishing, embossing, cutting and creasing etc. before returning the processed sheets to the printer or transporting to a bindery.

Foil blocking and Embossing

When designing with foil full consultation is essential at first stage of planning.

Some things to avoid:

- Planning to have foil blocking after lamination or varnish
- Having the foil image too close to the grip
- Putting two coloured foils too close together
- Using a large foiled area
- Consider the planning and lay down of the printed sheet as waste foil is very expensive