

# SILICONE TRANSFER PAPER - INSTRUCTIONS

## What Is Transfer Printing

Transfer printing is an indirect printing method where inks are screen-printed onto a paper using a vacuum bed printing machine. The inks are dried and then transferred under a heat press onto the garment.

The production of transfers takes advantage of the two-stage curing process of the plastisol inks, available from all major textile ink suppliers, which require heating to  $350^{\circ}$  to  $375^{\circ}$  F in a heat press to fully cure and develop wash resistance properties, yet only require  $195^{\circ}$  to  $250^{\circ}$  F to be dry to the touch on the paper. Hence the ink can be dried on the paper without curing and then transferred at a higher temperature to the garment to develop its full wash resistance.

#### Silicone Transfer Film

This TRANSFER FILM is a one-side coated paper supplied by Florida Flexible, called Silicone Transfer Paper, available in 20" x 25" and it's designed to peel away HOT or COLD. Excellent for garment labels and printed designs.

### Screen Printing

Because of the Silicone properties, pre-shrinking is a minimum. If this Transfer Film is subjected to cool temperatures during shipment or Storage and is then brought into the press room (which may be at a higher temperature and humidity), condensation can occur with subsequent ingress of moisture, causing cockling, curling, and wavy edges on the paper.

Print on the matte side of the FILM, the *glossier* side of the paper is the back-side.

Each color is printed in reverse, using a screen mesh count of typically 21 to 43T (210 to 430 holes per inch). If the printed color is too thin, it may result in poor application later. Each color is dried before the next color is added, at around 195-230° F for 20 to 25 seconds, using an infra-red or convection oven. If the ink is still sticky after drying, increase the dryer temperature. Note also that the printed colors should be butt-registered only, as overlapping colors will mix on transfer.

Gelling temperature may vary between Plastisol brands. We recommend using Hot Split Plastisol inks if a warm peel is desired and standard Plastisol inks when using a Cold Peel process.

Implementing Transfer Adhesive Powder is recommended when printing finer details such as Tags and small designs, this will also increase the life of the transfer.

## **Transfer by Heat Press**

When the whole image is printed, the print is ready for transfer. This should be done with a heat press typically set at 350° to 375° F, closing pressure set at 60 psi ("medium pressure"). It is advisable to warm the base (bottom) platen before beginning to transfer, as this prevents application problems with the first few transfers. Then place the garment on the non-heated base platen of the heat-press with the transfer on top, print side down. Close the press and leave for 8 to 10 seconds. Open the press and remove the garment, wait two (2) seconds, and then peel the film as required COLD or WARM depending on the plastisol brand used.

Note: For temperature measurements, it is <u>not</u> recommended that you rely on the digital readout of the dryer. It is more accurate to run a temperature "donut" probe through the drying tunnel. If you are experiencing any problem with paper upcurl, it is most likely caused by using the paper before it has come to press room temperature equilibrium, or because your dryer temperature is too high. To reduce curl, try lowering your dryer temperature in stages of 5° F each time until the curl disappears.

The above are GUIDELINES ONLY and should be taken as such. The user must realize that every press operation is different from the rest and affects the way that paper performs. The user must make his own judgments as to temperature settings, etc., depending on the particular circumstances and setup of his press and dryer.