

COLD ROLL LAMINATION PROCEDURE

1) Lamination Information:

The **Permacolor**[®] system is a series of pressure sensitive products for mounting and laminating images in the graphics industries. **Permacolor**[®] provides fast, efficient processing through cold roll lamination techniques without the need for heat, drying or messy liquid coating operations.

Lamination is a necessary step in the production of finished graphics. The process provides durable protection from abrasion, moisture, UV light and other damaging effects in both indoor and outdoor environments on various types of images including inkjet, electrostatic, thermal and photographic. This bulletin covers general lamination instructions for the following **Permacolor**[®] overlaminating films:

PermaFlex[®]	Wrap Lams.	ColorGard[™]	PrintGard[®]	Anti-Graffiti	Specialty
IP6100	LF3640	LUV8000	PG7000	SAG 175	PDG6000
IP6200	LF3640G	LUV8200	PG7200	SAG 53	(Dry-Erase)
PF6600	LF3630	LUV8300	PG7300	SAG 38	6300 Enhancers
PF6300					
PF6400					

2) Cold Roll Lamination Procedure:

When using any equipment, always follow the manufactures' instruction manual for safe operation.

- a) Make sure rolls of laminator are clean.
- b) Set motor control to 'run' and 'forward'. Set the 'speed' 3 -5 feet/ min.
- c) Thread the overlaminate film into the laminator.
 - Tape the liner to the top roll for take-up, if one is provided.
 - Pull the film through the nip until it is about one foot past the rolls.
- d) The pressure gauge control setting for the laminating rolls should be adjusted to a nominal 20 – 40 psi (this may vary depending on your particular laminator).
- e) Unwind tension should be kept at a minimum. Sufficient to maintain even pressure across the web to insure no wrinkles on the film as it is entering the laminating rollers. Too much tension will cause the film to stretch and induce curl in the finished laminate.

If no mounting adhesive is to be used on the back side of the image, create a sled or use a release sheet for back-up to keep the exposed adhesive from coming into contact with the roller or the laminator table around the edges of the image.

- f) Lower the roller onto the sled or release sheet. (Note: if a sled or mounting board is used, properly gap the rollers to account for the thickness of the board).
- g) Increase the web speed to 10 – 15ft. /min. or as fast as you are comfortable running under control.
- h) Feed the graphic into the rollers from the front of the machine using the guide bar.
- i) Cut the finished graphic from the web using a safety blade.
 - Trim the graphic and store the laminated image flat until time for shipment.
 - ii) Allow a minimum of 1 hour set time for adhesive to complete wet-out and build to full strength prior to rolling graphics.

IMPORTANT NOTICE: The information given and the recommendations made herein are based on our research and are believed to be accurate, but no guarantee of their accuracy or completeness is made. In every case, user shall determine before using any product in full scale production, or in any way, whether such product is suitable for user's intended use for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or fitness for a particular purpose, or any other warranty, express or implied. No representative of ours has any authority to waive or change the foregoing provisions, and no statement or recommendation not contained herein shall have any force of effect unless in an agreement signed by the officers of seller and manufacturer. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent without authority from the owner of the patent. The following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

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