



# Cold Roll Lamination For 3M Overlaminates

## Description

### Applications and Uses

3M overlaminates are intended only for use with 3M vinyl films in one or more of the following applications. Any other application is NOT warranted by 3M or covered by the worldwide 3M™ MCS™ Warranty unless 3M gives its prior written approval for the application.


- Provide protection for the inks or toners
- Provide protection from environmental conditions such as dirt and water
- Change the gloss of the finished graphic

### Limitations of End Uses

The following uses and applications are specifically NOT warranted.

- Application to non-3M films
- Printing on the laminate

## Health and Safety

 <b>Caution</b>
<p>When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.</p> <p>To obtain MSDS sheets for 3M products:</p> <ul style="list-style-type: none"> <li>• By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations.</li> <li>• Electronically, visit us at <a href="http://www.3M.com/MSDS">http://www.3M.com/MSDS</a>.</li> <li>• By mail, or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.</li> </ul> <p>When using any equipment, always follow the manufacturers' instructions for safe operation.</p>

## Sheet Preparation

Allow the printed graphics to dry completely before laminating. Refer to the drying instructions in the Instruction Bulletin for the particular ink series used.

Take steps to minimize the change in moisture content of the graphic liner. A change in moisture content can cause liners to curl and have wavy edges. Rack the sheets individually or as two sheets face-to-face, or wrap the stacked sheets with polyethylene and seal the stacks.

## Lamination Procedure


### Equipment

The procedures described in this Bulletin are based on a test laminator with the following design specifications.

- 3 inch (8 cm) diameter rolls
- 70 durometer (hardness) rolls
- 2 air cylinders, 1 inch (2.5 cm) in diameter

If your laminator has different design specifications, adjust the pressure control settings as needed. For example, at the nominal 30 pounds per inch gauge (psig) setting, a 2 inch (5 cm) diameter air cylinder produces a higher nip pressure than a 1 inch (2.5 cm) diameter cylinder.

### Procedure

 <b>Caution</b>
When using any equipment, always follow the manufacturers' instructions for safe operation.

1. Make sure the rolls of the laminator are clean.
2. Thread the laminate into the laminator.
  - a. Tape the laminate liner to the top of the clutch roll, if the laminator has one.
  - b. Pull the laminate through the nip until it is about 1 foot (25 cm) past the roll.
3. Set the pressure gauge of the laminator air cylinder to 30 pounds per square inch (2.1 kg/cm<sup>2</sup>).

Note: This value is a minimum recommended value and is based on results obtained from a test laminator. Your equipment may require a different setting.

4. Lower the roller.
5. Set the motor controls to RUN and FORWARD. Set the SPEED to approximately 2 feet per minute (61 cm per minute.)

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6. Gradually start the laminator. As the laminate moves out of the nip, make sure there are **no wrinkles** in the web.

Note: If wrinkles occur, the pressure control setting may be too high; reduce the setting to achieve the desired result.

7. Increase the web speed to approximately 15 feet per minute (4.5 m per minute).
8. Feed the graphic from the front of the laminator using the guide bar.

Note: Avoid stretching either the graphic or the laminate.

9. Cut the finished graphic from the web using a safety knife.
10. Trim the graphic.

## Storage and Shipping

- Store the graphics in a clean, dry area, out of direct sunlight, and at a temperature less than 100°F (38°C).
- Ship the finished graphics lying flat or in a roll. To roll the graphic, wrap it image side out on a minimum 6 inch (15 cm) diameter core. This prevents the liner and the premask, if used, from wrinkling or popping off.

## Warranty and Limited Remedy

The information contained and techniques described herein are believed to be reliable, but 3M makes no warranties, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. 3M shall not be liable for any loss or damages, whether direct, indirect, special, incidental or consequential, in any way related to the techniques or information described herein.

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#### Commercial Graphics Division

3M Center, Building 220-12E-04  
PO Box 33220  
St. Paul, MN 55133-3220 USA  
General Info. 1-800-374-6772  
Technical Info. 1-800-328-3908  
Fax 1-651-736-4233

Fax-on-Demand 1-800-364-0768 US/Canada or 1-651-732-6506 International  
Fax-on-Demand document: 6512  
[www.scotchprint.com](http://www.scotchprint.com)

#### 3M Canada

P.O. Box 5757  
London, Ontario  
Canada N6A 4T1  
1-800-265-1840  
Fax 519-452-6245

#### 3M México, S.A. de C.V.

Av. Santa Fe No. 55  
Col. Santa Fe, Del. Alvaro Obregón  
México, D.F. 01210  
52-55-52-70-04-00  
Fax 52-55-52-70-22-77

#### 3M Puerto Rico, Inc.

Puerto Rico Industrial Park  
P.O. Box 100  
Carolina, PR 00986-0100  
787-620-3000  
Fax 787-750-3035

## 3M Related Literature

**Before starting any job, be sure you have the most recent product and instruction bulletins.**

The following bulletins provide the information you need to properly use the 3M products that may be used in your graphic. You can find these bulletins on our Web site at [www.scotchprint.com](http://www.scotchprint.com). Or, call one of these phone numbers to order the desired bulletins via our Fax-on-Demand (FOD) system.

United States or Canada: 1-800-364-0768  
International: 1-651-732-6506

Subject	Bulletin No.	FOD No.
<b>Product Bulletins</b>		
Films Please visit our website or all our Fax on Demand system to identify and select the film bulletins you need.		
<b>Instruction Bulletins</b>		
Scoring and cutting	4.1	6501
Storage, handling, maintenance, removal	6.5	8505

### Bulletin Change Summary

This bulletin was updated to add the Warranty and Limited Remedy statement and improve the 3M Related Literature section.