APPLICATION

Note: For graphics larger than poster size, we recommend contacting a professional graphics installer for assistance.

General Instructions

Please review the General Instructions and Method: Horizontally-oriented Graphics or Method: Vertically-oriented Graphics before applying this film.

- **Surface Preparation**

  Windows must be thoroughly cleaned and dried before this film is applied.

  The installer must determine whether the window has a low surface energy coating. To do this, splash water on the window; if it beads up, it has a coating. To help ensure good adhesion of the film to the window, the installer should clean the window with a low abrasive cleaner such as Soft Scrub or Bon Ami Window Cleaner. This should remove any coating that may affect film adhesion.

- **General Instructions**

  Two people are required to apply most graphics. Notice the dark and light hands in the illustrations.

- **Tools**
  - 1" wide masking tape
  - Razor blade in a safety handle, or scissors
  - 3M™ Applicator PA-1 (blue or gold); also called a "squeegee"
  - 3M™ Low Friction Sleeve SA-1

- **Special Handling for Graphics Made with Media 8604 ES or 8605 ES**

  Any tape applied to the imaged side of media 8604 ES or 8605 ES may lift off the toner and wear coat when the tape is removed. This applies to tape used in making overlaps, for alignment or simply holding graphics in place prior to application.

- **Liner Removal Technique**

  Use two hands when pulling the liner from the film, using care not to stretch the film.
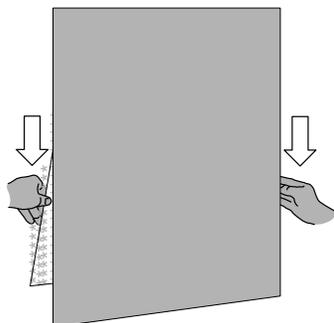
- **Application Technique**
  - Use a 3M squeegee with a paper sleeve
  - Pull the squeegee with your hand, don't push the across the graphic, which stretches the film.
  - Stroke in a straight line-not in an arc.
  - Use firm, overlapping strokes.
  - Re-stroke all edges after applying the graphic.

Squeegee with paper sleeve
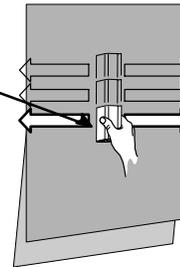
Maintenance and Cleaning

Refer to Instruction Bulletin 6.5.

Removal

Using two hands, start at the top of the graphic and pull it down slowly at a 120 to 180 degree angle.

Any residual haze on the window can usually be removed by wiping it with a clean, dry cloth. If necessary, also use a household window cleaning product.

See Instruction Bulletin 6.5 for more details.

Shelf Life, Storage and Shipping

Shelf Life
- Unprocessed: up to 24 months after receipt from 3M.
- Processed but unapplied: 12 months or less (see Example).
- Total as processed and unprocessed: not to exceed 24 months.

  EXAMPLE: If the film was stored for 16 months before processing, it must be applied within 8 months after processing.

Storage
- Store the film in a clean, dry area in the original container.
- Store the film out of direct sunlight and at less than 100°F (38°C).

Shipping
- Ship the finished graphic lying flat or in a roll. To roll the graphic, roll it film side out onto a core that is 6 inches (15 cm) or larger in diameter. These methods help prevent the film and application tape from wrinkling or popping off the liner.

APPLICATION METHOD 1

Orientation:　　　Vertical *(graphic is taller than it is wide)*
Imaging Method: Screen printed, Electrostatically imaged, Offset printed

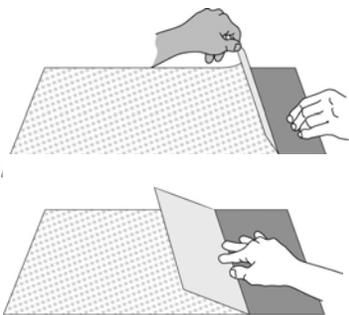Please review the General Instructions and this Method before applying the film.

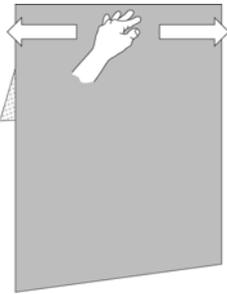**1** Clean and wipe the window, removing dust and any obvious contaminants.

5 Return to the center and stroke to the left edge.

2 Lay the graphic image side down on a flat surface. Pull back about 6 inches of the liner. Sharply crease the liner.

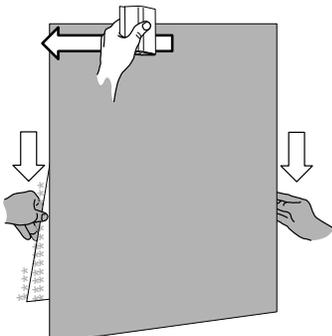**6** Pull the liner down as needed, using two hands.

3 Align the graphic on the window and use finger pressure to tack it in place.

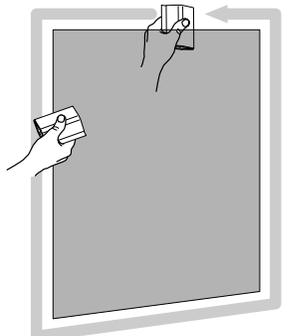**7** Move the squeegee down a couple of inches and continue stroking right and left, pulling the liner down as needed. Repeat to the bottom.
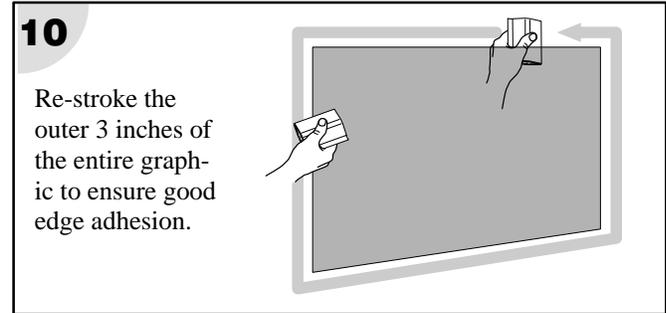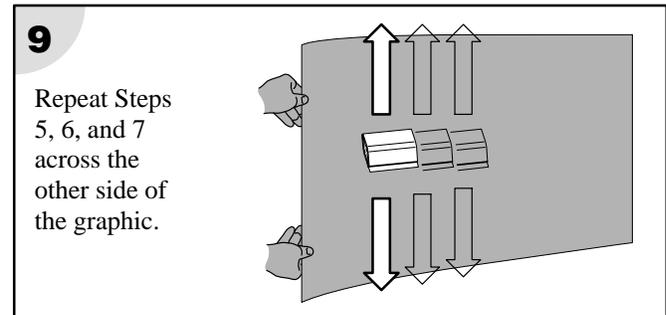
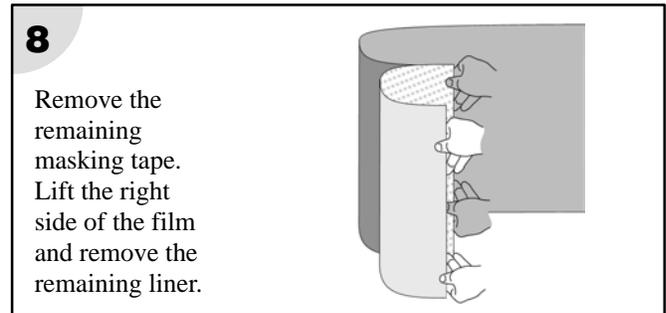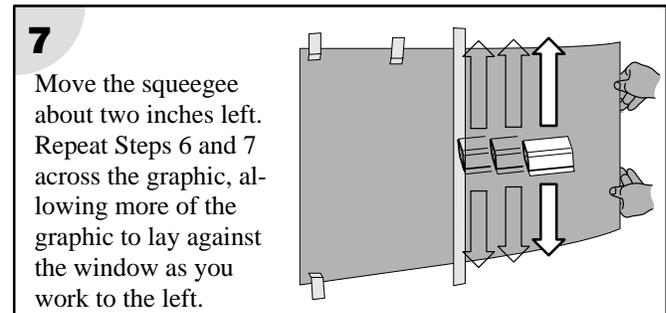**4** Stroke from the center to the right edge.
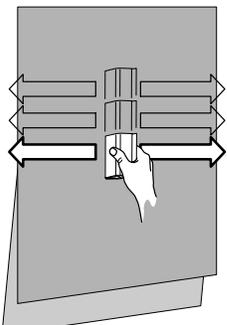
8 Re-stroke the outer 3 inches of the entire graphic to ensure good edge adhesion.

APPLICATION METHOD 2

Orientation: Horizontal *(graphic is wider than it is tall)*
Imaging Method: Screen printed, Offset printed *(see Method 3 also)*

Please review the General Instructions and this Method before applying the film.

1 Clean and wipe the window, removing dust any obvious contaminants.

2 Align the graphic on the window, and tape it in place as shown. Place a long strip of masking tape as shown.

3 Remove the short strips of tape from one side. Pull the film away from the liner all the way to the long strip of tape. Carefully cut off the liner.

4 Allow the part of the graphic near the center tape to lie against the window. Gently hold the rest of the graphic away from the window.

5 Begin at the center and stroke up.

6 Return to the center, and stroke down.

7 Move the squeegee about two inches left. Repeat Steps 6 and 7 across the graphic, allowing more of the graphic to lay against the window as you work to the left.

8 Remove the remaining masking tape. Lift the right side of the film and remove the remaining liner.

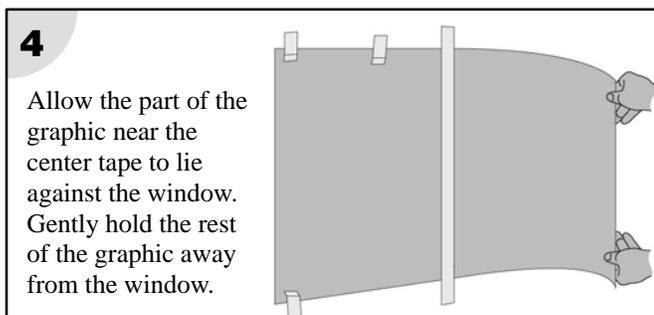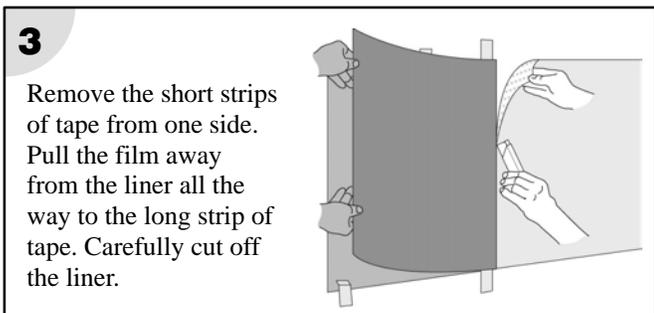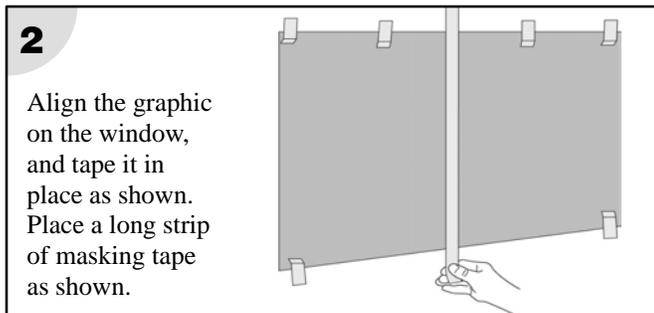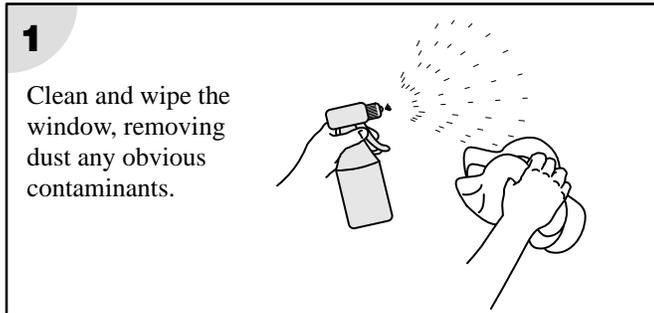**9** Repeat Steps 5, 6, and 7 across the other side of the graphic.

10 Re-stroke the outer 3 inches of the entire graphic to ensure good edge adhesion.

APPLICATION METHOD 3

Orientation: Horizontal *(graphic is wider than it is tall)*
Imaging Method: Screen printed, Offset printed *(see Method 3 also);* Electrostatically printed

This method, which uses no masking tape, is required if your graphic was made with wear coat and image transfer media 8604 ES or 8605 ES. The use of tape pulls off the toners and wear coat.

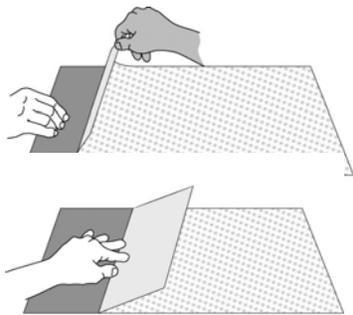Please review the General Instructions and this Method before applying the film.

1

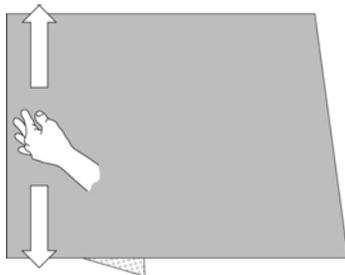Clean and wipe the window, removing dust and any obvious contaminants.

2

Lay the graphic image side down on a flat surface. Pull back about 6 inches of the liner. Sharply crease the liner.
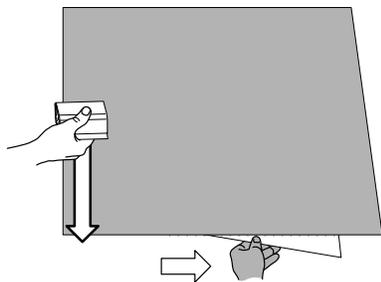
3

Bring the graphic to the window and align it along the vertical edge. Use finger pressure to tack it in place. DO NOT USE TAPE
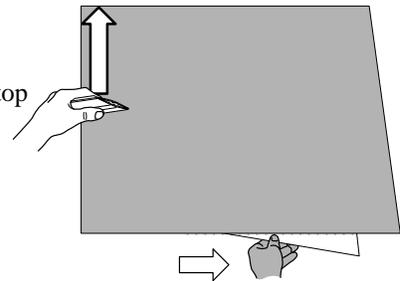
4

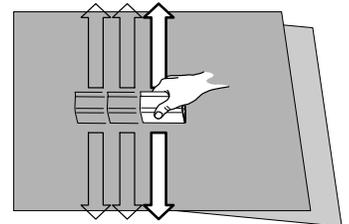Stroke from the center to the bottom edge.

5

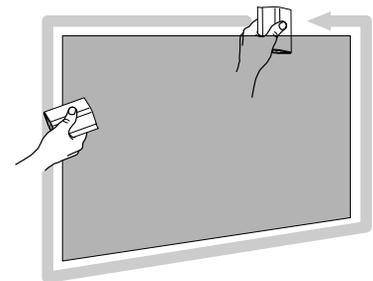Return to the center and stroke to the top edge.

6

Move the squeegee over a couple of inches and continue stroking center to top, center to bottom, as the helper pulls the liner away from the film.

7

Re-stroke the outer 3 inches of the entire graphic to ensure good edge adhesion.

Warranty and Limited Remedy

*The following is made in lieu of all other express or implied warranties, including any implied warranty of **merchantability** or fitness for a particular purpose:* Film 1180-10ixc is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. 3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods.

These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor or non-3M materials charges.

3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our Web site at www.scotchprint.com, or order them via our Fax-on-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

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

Subject	Bulletin No.	FOD No.
Product Bulletins		
3M™ Screen Printing Ink Series 1900	1900	2501
3M™ Screen Printing Ink Series 9700UV	9700	2507
3M™ Wear Coat and Image Transfer Media 8604 ES and 8605 ES	8604/8605	3561
Instruction Bulletins		
Screen printing with ink series 9700 UV - line color - 4-color	 3.4 3.13	 6004 6013
Screen printing with ink series 1900 - line color - 4-color	 3.11 3.12	 6011 6012
Transferring and laminating electrostatically printed images	4.7	6507
Storage, handling, maintenance, removal	6.5	8505

Bulletin Change Summary

Added Application Method 3; removed "wet application method" from Non–recommended uses, although 3M still recommends a dry application; other minor changes as shown by black bars in the margins.

3M

Commercial Graphics Division
3M Center, Building 220-6W-06
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: 9703
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 2003. All rights reserved.