



# Wall Decorating Film IJ86E

*A good choice for the environment!*

For UV Inkjet Printing and UV Screen Printing

## Product Description

3M™ Wall Decorating Film IJ86E is a 6-mil changeable film. Its pressure-activated adhesive features slideability, repositionability and air release channels, for fast and easy, bubble-free graphic installation. Use this film for a variety of indoor graphic applications that are printed with UV inkjet ink and UV screen printing.

## 3M's Environmental Solutions

3M recognizes that sustainability involves much more than a product offering. You can learn about 3M's ISO certification, EHS Management system, 3P program, LCM review and other sustainability programs at [www.3m.com/sustainability](http://www.3m.com/sustainability). These programs exemplify how 3M strives to responsibly operate in a manner that can help make the world we live in a better place. That is why the Dow Jones Sustainability Index has included 3M in the index for 9 consecutive years.

3M is also taking steps at the product level by offering new alternatives such as polyolefin films and overlaminates, including film IJ86E and 3M™ Scotchcal™ Graphic Film IJ35E 3M™ Scotchcal™ Overlaminates 8908 and 8909, which have no monomeric plasticizers or polyvinylchloride in their constructions and are made with less solvent in manufacturing when compared to traditional solvent based adhesive products. Chloride free constructions such as these eliminate halogen related disposal concerns. When printed with UV ink, VOC emissions associated with solvent inks are dramatically reduced, resulting in a graphic construction that has less impact on the environment.

## Wall Graphics

Film IJ86E is designed for interior wall graphics. However, the user is responsible for determining the product's suitability for the intended wall, including adhesion and removal characteristics. Due to the wide variability of smooth indoor walls, no claim for successful application or removal is made by 3M. Instruction Bulletin 5.37 provides comprehensive information for the most successful wall graphics film selection and application.

## Characteristics

These are typical values for unprocessed product; processing may change the values. Contact your 3M representative for a custom specification.

### Physical Characteristics

Characteristic	Value
Material	Polyolefin
Color	White, opaque
Gloss	Matte
Thickness	<b>Without adhesive:</b> 6 mils (0.15 mm) <b>With adhesive:</b> 6.5 - 7 mils (0.17-0.18 mm)
Adhesive type	Pressure- activated with air release channels
Adhesive color	Gray
Liner	Polyethylene-coated paper

## Application Characteristics

Characteristic	Value
Finished graphic application recommendation	<b>Surface type:</b> Clean, smooth, flat, low texture <b>Substrate type:</b> Painted wallboard, painted plaster, some wallpaper, glass. <i>Test and approve all substrates!</i> <b>Application temperature:</b> 40° - 100°F (4° - 38°C) <i>air and substrate</i> <b>Application method:</b> Dry
Finished graphic exposure temperature	-40° to 200°F (-40° to +93°C)
Graphic removal	Changeable; leaves little or no adhesive residue on a sound substrate. Clean, easy, damage-free removal is not assured. <b>Removal temperature:</b> Minimum ambient and substrate temperature 50°F (10°C)

## Warranty and Durability

### 3M Basic Product Warranty

This product has been tested and is believed to be a good product when used as recommended in this Bulletin. The film is covered by the 3M Basic Product Warranty and is guaranteed to be free of physical and manufacturing defects.

See the 3M Graphics Market Center Warranty Brochure for the complete warranty and remedy details. There is no assurance or guarantee for the following.

- printability
- visual appearance
- fitness for use
- removability or changeability
- damage to the substrate
- durability

### Expected Performance Life

6 months in a vertical exposure may be expected with typical usage.

3M Product and Instruction Bulletins provide practical recommendations for using this product in a way that maximizes performance, but using other 3M products or procedures with this film does not change the terms of the warranty.

### 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 or implied warranty arising out of a course of dealing, custom or usage of trade: all 3M products are 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.**

See the *3M Graphics Market Center Warranty Brochure* at 3Mgraphics.com, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

## Graphics Manufacturing

### All Printing Methods

This film has been optimized to perform well with a variety of UV inkjet printers and inks as well as UV screen printing inks and processes. It is the graphic manufacturer's responsibility to determine the film's suitability for use with their printers and inks.

To maximize the film performance:

- Properly cure the ink before applying graphic protection, if used, and before storing or installing a graphic.
- Always use the dry application method.

## UV Inkjet Printing Only

- Be aware that using sheeting film on a flat-bed inkjet printer may produce printing defects.
- The typical maximum ink limit is 280%.
- If you are storing sheeted and stacked finished graphics for an extended period of time, leave an unprinted margin (about 1/4 inch) to allow for possible shrinkage before trimming the graphic.

## Color Profiles

Always use a color profile and machine calibrations designed for non-vinyl film to optimize printing results

## Heat Sensitivity

This film can be more heat sensitive than vinyl film. Do not subject it to excessive heat during graphic fabrication. Excessive heat may cause the graphic to shrink or curl. Heated rollers may mar the surface.

## Protect the Printed Graphic

After printing, this film has less abrasion resistance than vinyl film. Be careful not to scratch or mar the surface.

## Application and Installation

Install the film using the dry application method.

Please refer to *Instruction Bulletin 5.37 Application Guide to Smooth and Textured Walls* for more information.

## Avoid Marring on Film Imaging Surface

Always use care to protect the film's imaging surface from marring during handling, processing and application. This film tends to mar in unprinted areas. See Application Tools for more information.

## Application Tools

Use a smooth, nick-free squeegee with a clean sleeve during application.

For walls that are not quite smooth, use extra caution during application to avoid marring the film. It's always a good idea to test your application surface, tools and techniques before applying the full graphic.

## Application to Glass

3M accepts no liability for glass breakage when using this film for window graphics. See Instruction Bulletin 5.1 for details.

## Cutting

This film is suitable for cutting shapes larger than 8 inches, but not for numbers or copy.

- Guillotine
- Hand cut
- Cold steel-rule die
- Electronic

## Shelf Life, Storage and Shipping

### Shelf Life

**Total shelf life: 2 years** from the date on the original box

Up to 2 years unprocessed, **OR** process within 1 year **and** apply within 1 year of processing

### Storage Conditions

- 40° to 100°F (4° to 38°C)
- Out of sunlight
- Clean dry area
- Original container
- Bring the film to print room temperature before using

### Shipping Finished Graphics

Flat, or rolled printed side out on 5 inch (13 cm) or larger core. This helps prevent the liner and, if used, the application tape from popping off.

## Health and Safety

### CAUTION



### Heavy Metals, Phthalates and Recycling

When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information. To obtain MSDS sheets for 3M products go to [3M.com/MSDS](http://3M.com/MSDS), or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

To the best of our knowledge, 3M film IJ86E does not contain any intentionally added Lead (Pb), Cadmium (Cd), Hexavalent Chromium (Cr6+) or Mercury (Hg), polybrominated diphenyl compounds (PBB) or polybrominated diphenyl ether compounds (PBDE). The user is responsible for determining and complying with all applicable standards and regulations.

Film IJ86E has been tested according to the Consumer Product Safety Improvement Act (CPSIA) for Children's Toys and has met the requirements for certain Phthalates.

Please check with your local municipality for any recycling opportunities for this product.

Additional information is available under 3M and the Environment at the [3Mgraphics.com](http://3Mgraphics.com) website.

## 3M Related Literature

### Before starting any job, be sure you have the most current Product and Instruction Bulletins.

The information in 3M Product and Instruction Bulletins is subject to change. Current Bulletins are available at [3Mgraphics.com](http://3Mgraphics.com). The following applicable Bulletins provide information and processes you need to properly make the graphics described in this Bulletin. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Bulletin types: PB = Product Bulletin; PB-IB = Product & Instruction Bulletin; IB = Instruction Bulletin

Subject	Type	Bulletin No.
3M Graphic Protection Products <i>overview of all graphic protection products and specific information on most overlaminates</i>	PB	GP-1
Scoring and cutting	IB	4.1
Application, substrate selection, preparation and substrate-specific application techniques	IB	5.1
Application, general procedures for indoor and outdoor dry applications	IB	5.5
A guide to understanding and applying graphics to common indoor and outdoor wall surfaces	IB	5.37
Storage, handling, maintenance, removal	IB	6.5
3M Graphics Center Warranty Brochure	Go to <a href="http://www.3Mgraphics.com">www.3Mgraphics.com</a> , Warranties	

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### Warranties

## Bulletin Change Summary

Change from clear to gray adhesive. Corrected minimum temperature for graphic removal from to 28°F (-2°C) to 50°F (10°C) .



**Commercial Graphics Division**  
3M Center, Building 220-12E-04  
PO Box 33220  
St. Paul, MN 55144-3220 USA  
General Info. 1-800-374-6772  
Technical Info. 1-800-328-3908  
Fax 1-651-736-4233

**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  
350 Chardon Avenue, Suite 1100  
San Juan PR 00918  
787-620-3000  
Fax 787-620-3018

[www.3Mgraphics.com](http://www.3Mgraphics.com)

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