

Product Description

- 2-mil, white vinyl translucent film
- For solvent, UV, and latex inkjet printing and cut graphics

Product Features

- Matte surface finish eliminates glare and provides uniform color in reflected and transmitted light
- Pressure sensitive, permanent adhesive adheres to rigid and flexible substrates
- Clear, synthetic liner used on the films makes immediate proofing possible
- Expected performance life of seven years (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface)

Recommended Types of Graphics and End Uses

- For use on internally-illuminated sign faces or general digital print graphics
- For use with fluorescent bulbs or LEDs. Typically for best results, 3M recommends:
 - film IJ3630 for fluorescent light applications
 - film IJ3730 for LED applications

When constructed and used as described in this bulletin, these types of graphics and end uses may be warranted by the 3M™ MCS™ Warranty or the 3M Performance Guarantee. Please read the entire bulletin for details.

Recommended Compatible Products

Visit [3Mgraphics.com/warranties](https://www.3Mgraphics.com/warranties) for a complete list of compatible products approved by 3M for use with the base film covered in this bulletin and used for the creation of graphics that may be eligible for the 3M™ MCS™ Warranty or 3M Performance Guarantee.

OEM Inkjet Inks and Printers for the 3M Performance Guarantee

See the [3M Performance Guarantee Matrix](#) for a complete list of compatible OEM inkjet inks and printers that are approved by 3M for use with the base film described in this bulletin and for the creation of completed graphics that may be eligible for the 3M Performance Guarantee.

Films

- [3M™ Diffuser Film 3635-30](#)
- [3M™ Diffuser Film 3635-70](#)
- [3M™ Envision™ Diffuser Film 3735-50](#)
- [3M™ Envision™ Diffuser Film 3735-60](#)
- [3M™ Blockout Film 3635-20B](#)
- [3M™ Blockout Film 3635-22B](#)
- [3M™ Dual-Color Film Series 3635-200](#)
- [3M™ Scotchcal™ Graphic Film 3650-114](#)

Substrates

- [3M™ Panagraphics™ III Wide-Width Flexible Substrate](#)
- [3M™ Envision™ Flexible Substrate FS-1](#)
- Flat, rigid substrates, see "Application Characteristics" on page 3

Quick Links

[3M Graphics Warranties](#)
[Technical Information Selector](#)
[Safety Data Sheets \(SDS\)](#)
[Flammability](#)
[Videos](#)

Some of these links lead to web-based resources that are not product-specific.



800.253.1569 | [wensco.com](https://www.wensco.com)



3M™ Scotchcal™ Translucent Graphic Film IJ3630, 3M™ Envision™ Translucent Film

Graphic Protection

- [3M™ Screen Print Gloss Clear 1920DR](#)
- [3M™ Scotchcal™ Luster Overlaminate 3619](#)
- [3M™ Scotchcal™ Matte Overlaminate 3620](#)
- [3M™ Scotchcal™ Gloss Overlaminate 3658G](#)
- [3M™ Scotchcal™ Matte Overlaminate 3660M](#)
- [3M™ Scotchcal™ Gloss Overlaminate 8518](#)
- [3M™ Scotchcal™ Luster Overlaminate 8519](#)
- [3M™ Scotchcal™ Matte Overlaminate 8520](#)
- [3M™ Scotchcal™ Ultra Matte Overlaminate 8915](#)
- [3M™ Screen Print UV Gloss Clear 9740i](#)

Certificate of 3M™ MCS™ Warranty

Graphic manufacturers who produce digitally printed graphics made with all branded 3M Graphics products, including 3M ink purchased through a qualified 3M distributor or 3M printing partner, may register to be recognized with a Certificate of 3M™ MCS™ Warranty. Only graphic manufacturers having a current Certificate of 3M™ MCS™ Warranty are eligible to extend this warranty to their customers.

NOTE: For non-digitally printed finished graphics, check your eligibility for the 3M™ MCS™ Warranty by viewing the warranty period found within this product bulletin or by using the warranty selector at www.3mgraphics.com/warranties.

Characteristics

These are the typical values for unprocessed product. Processing may change the values.

Physical Characteristics

Characteristic	Value
Material	Vinyl
Film Color	Translucent white
Thickness	Without adhesive: 2 mil (0.05 mm) With adhesive: 3 – 4 mil (0.08 – 0.1 mm)
Adhesive	Pressure-sensitive, permanent
Adhesive Color	Clear
Liner	IJ3630: polyethylene-coated paper IJ3730: clear, synthetic liner
Typical Adhesion 24 Hours After Application	Acrylic and uncoated, clear polycarbonate: 4 lbs/in. (0.7 kg/cm)
Typical Light Transmission	IJ3630-20: 34% IJ3730-50: 50% IJ3730-60: 62%
Chemical Resistance	<ul style="list-style-type: none">• Resists mild alkalis, mild acids, and salt• Excellent resistance to water (<i>does not include immersion</i>)

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Application Characteristics

Characteristic	Value
Finished Graphic Application Recommendation	Surface type: Flat, without rivets Surface type*: 3M flexible substrates; rigid substrates such as flat acrylic, polycarbonate**, high temperature co-polyester sheet, glass Application method: Wet, typical, or dry laminated Application temperature: 60°F (16°C) minimum air, substrate
Temperature Range After Application	-50°F to +170°F (-45°C to +77°C) (Though not for extended periods of time at the extremes.) For film applied to flexible substrates, low temperatures may cause either the film or the substrate to crack.
Recommended Light Source (for best results)	IJ3630: Fluorescent bulbs IJ3730: LEDs
Graphic Removal	Not removable

*These films typically adhere to solar-grade polycarbonate substrate. However, some lots of this substrate may inhibit adhesion. Contact Technical Service if you are having difficulty. See [3M Instruction Bulletin 5.7](#) for additional information.

**Polycarbonate substrates may require oven drying before use due to outgassing of moisture from the polycarbonate causing the film to bubble. Refer to the manufacturers' instructions.

IMPORTANT NOTE

The user is responsible for determining and complying with all applicable building codes affecting the use of materials in interior and exterior awning, banner, and sign face applications, including flammability standards. For more information on flammability requirements, contact your local building code officials. For information on the results of flammability testing on 3M flexible substrates, call 1-800-328-3908.

Factors Affecting Graphic Performance Life

The actual performance life of a graphic is affected by:

- The combination of graphic materials used
- Complete ink drying or curing
- Selection, condition, and preparation of the substrate
- Surface texture
- Application methods
- Angle and direction of sun exposure
- Environmental conditions
- Cleaning and maintenance methods

Graphics Manufacturing

CAUTION

Before using any equipment, always read the manufacturer's instructions for safe operation.

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Inkjet Printing

Total Ink Coverage

Backlit images require greater density. This can be achieved by using the printer's double strike input mode (if available). When using this mode, you have reached the maximum total ink coverage when you can no longer obtain color consistency throughout the graphic and/or the graphic cannot be adequately dried after printing.

The maximum recommended total ink coverage for this film is:

- **270%** when printed entirely with approved 3M solvent inkjet inks.
- **280%** when printed entirely with approved 3M UV inkjet inks.
- **280%** when printed entirely with approved 3M latex inkjet inks.
- **250%** when printed on the Mimaki JV5 Series printer entirely with HS ink series ([3M Performance Guarantee](#)).

Do not exceed the recommended total ink coverage for this product. Having too much total physical ink on the product results in media characteristic changes, incomplete drying, overlamine lifting, and/or poor graphic performance. For additional details about total ink coverage, refer to the 3M product and instruction bulletins for 3M inks or the [3M Performance Guarantee Matrix](#) for OEM inks.

Completely Dry Graphics

IMPORTANT NOTE

Incomplete drying or curing can result in graphic failure including curling, increased shrinkage, and adhesion failure, which are not covered under any 3M Graphics warranty.

See the ink's 3M product and instruction bulletins for more details.

Construction Options

See [3M Instruction Bulletin 4.26](#) for detailed information.

Maximum Three Layers of Film

IMPORTANT NOTE

A third layer of film on any one surface is warranted only if the top layer is an approved overlamine and no more than two layers of any film are even with the edges of the substrate.

NEVER place an overlap over an existing overlap, which creates four layers.

Cutting

See [3M Instruction Bulletin 4.1](#) for Sheeting, Scoring and Film Cutting details.

Graphic Protection

Graphic protection may improve the appearance, performance, and durability of the graphic. Click on the graphic protection options listed in this product bulletin or see the [3M Graphics Materials Product Catalog](#) for more information.

IMPORTANT NOTE

During installation, scratches may occur on films without graphic protection.

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Application Tapes

There are two types of application tapes. See [3M Instruction Bulletin AT-1](#) to determine what application tape is recommended for your film or finished graphic.

Premasking Tape

Premasking tape increases stiffness during application while preventing stretching and damage. Use when little or no liner is exposed. See [3M Instruction Bulletin 4.3](#) for complete details.

Prespacing Tape

Prespacing tape holds cut and weeded letters or graphics in place during application and after removal of the film liner, while preventing stretching and damage. Use when large amounts of liner are exposed. See [3M Instruction Bulletin 4.3](#) for complete details.

Application and Installation

In addition to other 3M bulletins specified in this document, the following bulletins provide details users may need to successfully apply a graphic.

- [3M Instruction Bulletin 4.22](#) Lamination Basics for Inkjet Printed Graphics
- [3M Instruction Bulletin 4.60](#) 3M™ Envision™ Translucent and Diffuser Films. Guidelines for Backlit Signs.
- [3M Instruction Bulletin 5.1](#) Select and Prepare Substrates for Graphic Application
- [3M Instruction Bulletin 5.30](#) Application of 3M Pressure-Sensitive Films to 3M Flexible Substrates
- [3M Instruction Bulletin 5.4](#) Application: Fleet Trucks
- [3M Instruction Bulletin 5.5](#) Application, General Procedures for Interior and Exterior Dry Application
 - For roll application, the dry method is acceptable.
- [3M Instruction Bulletin 5.7](#) Application, Wet Method for Translucent, Inkjet, Screen Printed and Cut Graphics
 - For applications by hand, the detergent and water application method is recommended for this pressure-sensitive film. Dry application by hand may leave dark streaks or bubbles that could be visible in transmitted light.
- [3M Instruction Bulletin 6.5](#) Storage, Handling, Maintenance and Removal of Films and Sheetings

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See [3M Instruction Bulletin 6.1](#) for details.

Removal

Removal requires heat and/or chemicals. 3M makes no claims as to the ease or speed of removal. This product may not remove similarly to other products in the same category. See [3M Instruction Bulletin 6.5](#) for details.

Shelf Life, Storage, and Shipping

Shelf Life

The shelf life is **never more than three years** from the date of manufacture on the original box.

If you process the film, the shelf life is changed to **one year** from the processing date, but no later than three years from the manufacturing date.

Storage Conditions

- 40°F to 100°F (4°C 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 6 in. (15 cm) or larger core. This helps prevent the liner, and, if used, the application tape from popping off.

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Health and Safety

CAUTION

When handling any chemical products, read the manufacturers' container labels and the safety data sheets (SDS) for important health, safety, and environmental information. To obtain SDS for 3M products go to [3M.com/SDS](https://www.3m.com/SDS). To request SDS by mail, or in case of an urgent situation, call 1-800-364-3577 or 1-651-737-6501.

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

Warranty Information

Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics product and instruction bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time the film was purchased. Information found at [3M.com/graphicswarranties](https://www.3m.com/graphicswarranties) includes:

- [3M Graphics Warranties Bulletin](#)
 - This bulletin contains information on limitations, exceptions, and warranty period reductions for 3M Graphics warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this bulletin.
- [3M Graphics Warranties Selector](#)
 - Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/printer platform.
- [U.S. Desert Southwest Region Map](#)
 - Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.

Technical Information

The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment, reviewing all applicable regulations and standards, and reviewing the product label and use instructions. Failure to properly evaluate, select, and use a 3M product in accordance with instructions or to meet all applicable safety regulations may result in injury, sickness, death, and/or harm to property.

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Warranty, Limited Remedy, and Disclaimer

Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Commercial Solutions

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