

## Film Series 3630

## Film Series 3730

### Product Description

- 2-mil, vinyl translucent films, available in crisp, clear colors (many with simulated PANTONE® color references)
- For screen printing, cut graphics, and thermoforming
  - Use Film Series 3630 for fluorescent or LED lighting applications
  - Use Film Series 3730 for LED applications

#### Quick Links

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

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

### Product Features

- 3M™ Scotchcal™ Translucent Film Series 3630 and 3M™ Envision™ Translucent Film Series 3730 (the “Products”) have matte surface finishes to eliminate glare and provide uniform color in reflected and transmitted light
- Pressure-sensitive, non-removable adhesive adheres to rigid and flexible substrates alike
- Synthetic, lay-flat liner is unaffected by water or humidity
- Cut electronically
- Thermoformable
- Not removable
- 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 indoor or outdoor use on internally-illuminated sign faces
- First and second surface application on rigid substrates
- First surface applications only on flexible substrates
- Thermoforming on rigid plastic substrates
- For use with fluorescent bulbs or LEDs. For best results, 3M recommends:
  - film 3630 for fluorescent or LED light applications
  - film 3730 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.

### Special Considerations

3M recommends weeding before thermoforming when using film with red pigments. The red pigments available to film manufacturers today can stain plastic when thermoformed.

3M helps users match day/night colors when the same color density is required in frontlit and backlit graphics to maximize a sign’s effectiveness. Please contact 3M for assistance when this is a concern.

### Recommended Compatible Products

#### Screen Printing Inks

- [3M™ Screen Printing Ink Series 1900](#)
- [3M™ Screen Printing UV Ink Series 9800](#)



# 3M™ Scotchcal™ Translucent Graphic Film Series 3630

## 3M™ Envision™ Translucent Film Series 3730

### Films

- [3M™ Day/Night Film 3635-91](#)
- [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](#)

### Substrates

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

### Graphic Protection

- [3M™ Scotchcal™ Gloss Overlamine 3658G](#)
- [3M™ Scotchcal™ Matte Overlamine 3660M](#)
- [3M™ Screen Print Gloss Clear 1920DR](#)
- [3M™ Screen Print UV Gloss Clear 9740i](#)
- [3M™ Screen Print UV Gloss Clear 9800CL](#)

### 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](http://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	<b>Film Series 3630:</b> Translucent, 78 colors <b>Film Series 3730:</b> Translucent, 25 colors See “Colors” on page 4.
Thickness	<b>Without adhesive:</b> 2 mil (0.05 mm) <b>With adhesive:</b> 3 – 4 mil (0.08 – 0.1 mm)
Adhesive	Pressure-sensitive
Adhesive Color	Clear
Liner	Translucent, synthetic lay-flat liner
Typical Adhesion 24 Hours After Application	<b>Acrylic and uncoated, clear polycarbonate:</b> 4 lbs/in. (0.7 kg/cm)
Chemical Resistance	Resists mild alkalis, mild acids, and salt Excellent resistance to water ( <i>does not include immersion</i> )
Flammability	Users may view the linked ASTM E84 reports <a href="#">3630</a> and <a href="#">3730</a> or go to the online product catalog at <a href="http://3mgraphics.com">3mgraphics.com</a> . For all other test reports call 1-800-328-3908.

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630

## 3M™ Envision™ Translucent Film Series 3730

### Application Characteristics

Characteristic	Value
<b>Finished Graphic Application Recommendation</b>	<p><b>Surface type:</b> Flat, without rivets</p> <p><b>Surface type*:</b> 3M flexible substrates; rigid substrates such as flat acrylic, polycarbonate**, high temperature co-polyester sheet, glass</p> <p><b>Application method:</b> Wet or dry, typical</p> <p><b>Application temperature:</b> 60°F (16°C) minimum air, substrate</p>
<b>Temperature Range After Application</b>	<p>-50°F to +170°F (-45°C to +77°C)</p> <p>(Though not for extended periods of time at the extremes.)</p> <p>Low temperature impacts on film applied to flexible substrates may result in cracking of the film and/or substrate</p>
<b>Recommended Light Source (for best results)</b>	<p><b>Film Series 3630:</b> Fluorescent bulbs</p> <p><b>Film Series 3730:</b> LEDs</p>
<b>Graphic Removal</b>	Not removable

\*These films typically adhere to solar-grade polycarbonate substrates. However, some lots of this substrate may inhibit adhesion. See [3M Instruction Bulletin 5.7](#) for additional information.

\*\*Polycarbonate substrates require oven drying before use to remove moisture from the polycarbonate that will otherwise cause the film to bubble. Refer to manufacturers instructions for proper drying times and temperatures.

#### IMPORTANT NOTE

Surface impressions may occur when the film is rolled up and the liner impresses slightly upon the vinyl surface. These impressions may disappear when the film is exposed to the sun, or a heat gun can be used on dull areas to restore the film's original appearance. Surface impressions are not considered a product quality defect as they are temporary in nature.

#### 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.

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630

## 3M™ Envision™ Translucent Film Series 3730

### Colors

Colors shown on a monitor and when printed are approximate representations of the actual color available.

Some of these products are a simulation of the closest PANTONE®-identified color standard. Consult current PANTONE Color Publications for accurate color. PANTONE® is a trademark or registered trademark of Pantone LLC in the United States and/or other countries.

#### **i** IMPORTANT NOTE

All color references are based on reflected, not transmitted, light viewing.

### Color Chart for 3M™ Scotchcal™ Translucent Film Series 3630


























Product Color	PANTONE Color	Product Color	PANTONE Color	Product Color	PANTONE Color
3630-005 Ivory	PANTONE 7500 C	3630-74 Kumquat Orange	PANTONE 151 C	3630-137 European Blue	PANTONE 2757 C
3630-015 Yellow	PANTONE 116 C	3630-75 Marigold	PANTONE 7549 C	3630-141** Gold Nugget	Not Available
3630-20 White	Not Available	3630-76 Holly Green	PANTONE 7734 C	3630-143 Poppy Red	PANTONE 485 C
3630-22* Black	PANTONE Black C	3630-77 Indigo	Not Available	3630-144 Poppy Orange	Not Available
3630-25 Sunflower	PANTONE 130 C	3630-78 Vivid Rose	PANTONE 206 C	3630-146 Lt. Kelly Green	PANTONE 340 C
3630-26 Green	PANTONE 7727 C	3630-83 Regal Red	PANTONE 200 C	3630-147 Lt. European Blue	PANTONE 7690 C
3630-27 Electric Blue	Not Available	3630-84 Tangerine	PANTONE 1575 C	3630-149 Light Beige	Not Available
3630-33 Red	PANTONE 1797 C	3630-86 Blue Lagoon	Not Available	3630-156 Vivid Green	PANTONE 356 C
3630-36 Blue	PANTONE 281 C	3630-87 Royal Blue	PANTONE 2745 C	3630-157 Sultan Blue	PANTONE 287 C
3630-37 Sapphire	Not Available	3630-93 Fire Engine Red	Not Available Not	3630-158 Bright Violet	Not Available
3630-38 Fuchsia	Not Available	3630-97 Bristol Blue	Available Not	3630-163 Scarlet	Not Available
3630-39 Warm Beige	Not Available	3630-98 Electric Pink	Available	3630-167 Bright Blue	PANTONE 2945 C
3630-43 Lt. Tomato Red	Not Available	3630-106 Brilliant Green	PANTONE 368 C	3630-187 Infinity Blue	Not Available
3630-44 Orange	Not Available	3630-111 Dover White	Not Available	3630-196 Forest	Not Available
3630-47 Patriot Blue	Not Available	3630-115 Lt. Lemon Yellow	Not Available	3630-216 Blue Coral	Not Available
3630-49 Burgundy	Not Available	3630-118 Intense Magenta	PANTONE 241 C	3630-217 Deep Sea Blue	Not Available
3630-51 Silver Gray	Not Available	3630-121** Silver	PANTONE 877 C	3630-227 Azure	Not Available
3630-53 Cardinal Red	PANTONE 187 C	3630-124 Burnt Orange	Not Available	3630-235 Autumn Yellow	Not Available
3630-56 Glacial Green	Not Available	3630-125 Golden Yellow	PANTONE 1235 C	3630-236 Turquoise	PANTONE 3282 C
3630-57 Olympic Blue	Not Available	3630-126 Dk Emerald Green	PANTONE 3425 C	3630-246 Teal Green	PANTONE 321 C
3630-59 Dark Brown	Not Available	3630-127 Intense Blue	PANTONE 300 C	3630-276 Kentucky Blue Grass	Not Available
3630-61 Slate Gray	PANTONE 431 C	3630-128 Plum Purple	PANTONE 525 C	3630-287 Marine Blue	Not Available
3630-63 Rust Brown	PANTONE 7610 C	3630-131** Gold Metallic	PANTONE 872 C	3630-297 Twilight Blue	Not Available
3630-69* Duranodic	PANTONE Black 7 C	3630-133 Raspberry	PANTONE 220 C	3630-316 Jade Green	Not Available
3630-71 Shadow Gray	PANTONE Warm Gray 7 C	3630-135 Yellow Rose	Not Available	3630-328 Berry Burgundy	Not Available
3630-73 Dark Red	PANTONE 7621 C	3630-136 Lime Green	PANTONE 361 C	3630-337 Process Blue	Not Available

\* Films 3630-22 and 3630-69 are effectively opaque for most sign uses.

\*\* Films 3630-121, 3630-131, and 3630-141 are metallic colors with reduced MCS™ Matrix warranties. Refer to the MCS™ Matrix Warranty for additional information.

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630 3M™ Envision™ Translucent Film Series 3730

## Color Chart for 3M™ Envision™ Translucent Film Series 3730

Product Color	PANTONE Color	Product Color	PANTONE Color	Product Color	PANTONE Color	
	3730-015L Yellow	PANTONE 116 C		3730-57L Olympic Blue	Not Available	
	3730-20L White	Not Available		3730-73L Dark Red	PANTONE 7621 C	
	3730-26L Green	PANTONE 7727 C		3730-76L Holly Green	Not Available	
	3730-33L Red	PANTONE 186 C		3730-83L Regal Red	Not Available	
	3730-36L Blue	Not Available		3730-97L Bristol Blue	Not Available	
	3730-43L Lt. Tomato Red	PANTONE 1795 C		3730-106L Brilliant Green	Not Available	
	3730-44L Orange	Not Available		3730-125L Golden Yellow	PANTONE 1235 C	
	3730-49L Burgundy	Not Available		3730-127L Intense Blue	Not Available	
	3730-53L Cardinal Red	PANTONE 200 C				
					3730-128L Plum Purple	Not Available
					3730-133L Raspberry	Not Available
					3730-137L European Blue	Not Available
					3730-156L Vivid Green	PANTONE 348 C
					3730-157L Sultan Blue	Not Available
					3730-167L Bright Blue	PANTONE 2935 C
					3730-246L Teal Green	Not Available
					3730-337L Process Blue	Not Available

### Custom Colors and Color Matching

- Custom colors are available by request. Pigment durability and manufacturing limitations do not permit exact color matching of all colors.
- When viewed in reflected light rather than illuminated light, similar colors in Film Series 3630 and 3730 will look the same.
- Because Film Series 3630 and 3730 are optimized for different light sources, an exact color match between these two colored films may not be possible when illuminated. 3M formulates the Film Series 3730 colors to match the Film Series 3630 colors as closely as possible. However, in some instances a slight color variation between the products may be noticeable in transmitted light.
- The “L” behind a color number (e.g., 3730-33L) designates the color is optimized for LED light sources.

### 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



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

### Illuminated Signs Require Special Consideration

Clear and translucent films tend to be more sensitive to shrinkage when printed with high total ink coverage. Printed film that is not sufficiently dried prior to creating an overlap may shrink and result in a light leak.

Backlighting any film, no matter how it is imaged, may reduce the density of the colors on the image.

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630 3M™ Envision™ Translucent Film Series 3730

## Illuminated Signs Using LEDs

Making a successful sign requires users to consider many factors. This section provides general guidelines for illuminating signs using LEDs. Please contact Technical Service (1-800-328-3908) before starting to resolve any questions or concerns about sign making.

## Comparing Light Transmission using LEDs

Most 3M™ Envision™ Translucent Films 3730 are designed to deliver an increase in light transmission compared to 3M™ Scotchcal™ Translucent Films 3630.

Film		Typical % Increase (Gain) in Light Transmission (New Calculation)*
Product Number 3630-xxx/3730-xxx	Color	When Comparing Unmounted Film with Adhesive - 3630 Series to Similar 3730 Series
015 / 015L	Yellow	-6
20 / 20L	White	64
33 / 33L	Red	61
43 / 43L	Lt. Tomato Red	12
44 / 44L	Orange	36
49 / 49L	Burgundy	15
57 / 57L	Olympic Blue	0
73 / 73L	Dark Red	42
76 / 76L	Holly Green	16
83 / 83L	Regal Red	29
106 / 106L	Brilliant Green	19
125 / 125L	Golden Yellow	28
127 / 127L	Intense Blue	18
128 / 128L	Plum Purple	3
133 / 133L	Raspberry	4
156 / 156L	Vivid Green	35
157 / 157L	Sultan Blue	29
167 / 167L	Bright Blue	52
246 / 246L	Teal Green	43
337 / 337L	Process Blue	36
26 / 26L	Green	-3

\* Instrument:

X-Rite Ci7800 d/8° benchtop spectrophotometer. CIE Y is the reported transmission metric based on D65/10° weighting functions.

Sample measurement: Samples tested through poly liner, adhesive, and film.

## Color-to-Color Variation for Gain

The variation in gain from color-to-color is attributable to the different film color formulations. In general, every individual color in Film Series 3630 and 3730 produces its own unique light transmission value.

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### Other Considerations for Signs using LEDs

- A significant reduction in LEDs may affect other performance factors of an illuminated sign, such as uniformity. Users are responsible for ensuring their LED layout meets all of its intended performance requirements.
- If the brightness of signs created using a film from the 3630 series is acceptable, then:
  - a comparable brightness may be achieved using a film from the 3730 series with fewer LEDs.
  - a similar level of brightness for white may be maintained.
  - acceptable sign face uniformity may be maintained without any changes to the light box depth if the LED layout is adjusted properly.
- Some sign box manufacturers prefer to apply color translucent films directly to a rigid diffuse substrate, such as diffuse polycarbonate or acrylic; instead of using diffuser film. In this case, there will still be an increase in light output over the use of 3630 films, however, the gain in light transmission for using 3730 films would be less than the values shown in the "Comparing Light Transmission using LEDs" on page 8.
- See [3M Instruction Bulletin 4.60](#) for additional guidelines and suggestions for using 3M™ Envision™ Translucent and Diffuser Films.

### Video

Click [here](#) to see a brief lightbox demonstration comparing Film Series 3730 to Film Series 3630.

### Screen Printing

Formulations and processing conditions can affect ink durability. Users should refer to their ink's product and instruction bulletins for limitations and proper usage.

Graphic protection can improve the appearance, performance, and durability of a graphic. A clear coat also prevents chalking on unprinted films.

Whether users apply screen print clears with traditional screening methods or roller coating, they should use equipment designed to handle high viscosity materials and ensure the coating is evenly applied according to the specifications in the clear's instruction bulletin.

### Construction Options

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

### Maximum of 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, as doing so creates four layers.

### Thermoforming

#### **CAUTION**

The Products may emit vapors during the thermoforming process. Be sure to read and follow the information contained in [3M Instruction Bulletin 5.16](#) before thermoforming.

### Channel Letter Faces

#### **IMPORTANT NOTE**

When using the Products on rigid plastic channel letter faces, avoid contact between the film and the adhesive used to attach the trim cap edge. These adhesives attack film and cause curling, lifting, and premature failure of the film.

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### Spray Painting

The performance of or application of Lacryl™ or other diffuser paints to the Products is not warranted. The Products can be spray painted with Lacryl™ diffuser paints with good performance. However, certain additional warranty limitations apply. Additionally, the user is responsible for ensuring that the selected diffuser paint is compatible with the Products. 3M reserves the right to deny warranty coverage if 3M determines, at its sole discretion, that the use of diffuser paint adversely affected the appearance, durability, or performance of the Products.

### 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.

### 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 solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See [3M Instruction Bulletin 6.5](#) for details.

### Removal

These films are not removable. 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.

Processing the film changes its shelf life 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 room temperature before use

### Shipping Finished Graphics

Flat, or rolled printed side out on a 6 in. (15 cm) or larger core. This helps prevent the application tape, if used, from popping off.

## 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 that 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 and 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.

The warranties set forth in this Bulletin are made in lieu of all other express or implied warranties, including any implied warranty of merchantability, fitness for a particular purpose, or arising out of a course of dealing, custom, or usage of trade.

### 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.

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630 3M™ Envision™ Translucent Film Series 3730

## 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.

## 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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St. Paul, MN 55144

1-800-328-3908  
3M.com/Graphics

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**3M** Science.  
Applied to Life.™

3M Illuminated Sign Solutions Reference Guide

**The colors you want.  
The consistency you need.  
The partner you trust.**



# Image is everything.

Your brand has to be consistent whether it's in New York or New Delhi. With the most colors (including custom) and design options plus unparalleled global consistency and an industry-leading warranty, 3M is your single source for components of illuminated sign faces.

- ▶ Colored Translucent Films
  - 3M™ Envision™ Translucent Film Series 3730
  - 3M™ Scotchcal™ Translucent Graphic Film Series 3630
- ▶ Inkjet Printable Films
- ▶ Overlaminates
- ▶ Light Management Films
- ▶ Flexible Substrates
- ▶ 3M™ MCS™ Warranty



# 3M™ Envision™ Translucent Film Series 3730


Customize the brightness\* of your illuminated signs with films that provide more light transmission.

	<b>Yellow</b> 3730-015L PANTONE® 116 C		<b>Raspberry</b> 3730-133L		<b>European Blue</b> 3730-137L
	<b>Golden Yellow</b> 3730-125L PANTONE® 1235 C		<b>Plum Purple</b> 3730-128L		<b>Teal Green</b> 3730-246L
	<b>Orange</b> 3730-44L		<b>Blue</b> 3730-36L		<b>Holly Green</b> 3730-76L
	<b>Light Tomato Red</b> 3730-43L PANTONE® 1795 C		<b>Sultan Blue</b> 3730-157L		<b>Green</b> 3730-26L PANTONE® 7727 C
	<b>Red</b> 3730-33L PANTONE® 186 C		<b>Olympic Blue</b> 3730-57L		<b>Vivid Green</b> 3730-156L PANTONE® 348 C
	<b>Dark Red</b> 3730-73L PANTONE® 7621 C		<b>Process Blue</b> 3730-337L		<b>Brilliant Green</b> 3730-106L
	<b>Cardinal Red</b> 3730-53L PANTONE® 200 C		<b>Intense Blue</b> 3730-127L		<b>White</b> 3730-20L PANTONE® 348 C
	<b>Regal Red</b> 3730-83L		<b>Bright Blue</b> 3730-167L PANTONE® 2935 C		
	<b>Burgundy</b> 3730-49L		<b>Bristol Blue</b> 3730-97L		

\*Most graphics using film series 3730 on diffuser film 3735-50 provide more light transmission than other graphics using 3M™ Scotchcal™ Translucent Film Series 3630 on 3M™ Diffuser Film 3635-30. See 3M Product Bulletin 3630/3730 for details.


# 3M™ Scotchcal™ Translucent Graphic Film Series 3630

Get the attention you deserve with films that make your brand look great around the clock.

	<b>Yellow</b> 3630-015 PANTONE® 116 C		<b>Poppy Red</b> 3630-143 PANTONE® 485 C		<b>Electric Pink</b> 3630-98
	<b>Marigold</b> 3630-75 PANTONE® 7549 C		<b>Scarlet</b> 3630-163		<b>Vivid Rose</b> 3630-78 PANTONE® 205 C
	<b>Sunflower</b> 3630-25 PANTONE® 130 C		<b>Fire Engine Red</b> 3630-93		<b>Plum Purple</b> 3630-128 PANTONE® 525 C
	<b>Golden Yellow</b> 3630-125		<b>Red</b> 3630-33 PANTONE® 1797 C		<b>Bright Violet</b> 3630-158
	<b>Autumn Yellow</b> 3630-235		<b>Dark Red</b> 3630-73 PANTONE® 7621 C		<b>Indigo</b> 3630-77
	<b>Yellow Rose</b> 3630-135		<b>Cardinal Red</b> 3630-53 PANTONE® 187 C		<b>Royal Blue</b> 3630-87 PANTONE® 2745 C
	<b>Poppy Orange</b> 3630-144		<b>Regal Red</b> 3630-83		<b>Electric Blue</b> 3630-27
	<b>Kumquat Orange</b> 3630-74 PANTONE® 151		<b>Burgundy</b> 3630-49		<b>Blue</b> 3630-36 PANTONE® 281 C
	<b>Tangerine</b> 3630-84 PANTONE® 1575 C		<b>Berry Burgundy</b> 3630-328		<b>Patriot Blue</b> 3630-47
	<b>Orange</b> 3630-44		<b>Intense Magenta</b> 3630-118 PANTONE® 241 C		<b>Sultan Blue</b> 3630-157 PANTONE® 287 C
	<b>Burnt Orange</b> 3630-124		<b>Fuchsia</b> 3630-38		<b>Deep Sea Blue</b> 3630-217
	<b>Light Tomato Red</b> 3630-43		<b>Raspberry</b> 3630-133 PANTONE® 220 C		<b>Azure</b> 3630-227

# 3M™ Scotchcal™ Translucent Graphic Film Series 3630

Get the attention you deserve with films that make your brand look great around the clock.

	<b>Light European Blue</b> 3630-147 PANTONE® 7690 C		<b>Blue Coral</b> 3630-216		<b>Lime Green</b> 3630-136 PANTONE® 360 C
	<b>Olympic Blue</b> 3630-57		<b>Teal Green</b> 3630-246 PANTONE® 321 C		<b>Brilliant Green</b> 3630-106 PANTONE® 368 C
	<b>Process Blue</b> 3630-337		<b>Turquoise</b> 3630-236 PANTONE® 3282 C		<b>Light Lemon Yellow</b> 3630-115
	<b>Intense Blue</b> 3630-127 PANTONE® 300 C		<b>Blue Lagoon</b> 3630-86		<b>Ivory</b> 3630-005 PANTONE® 7500 C
	<b>Bright Blue</b> 3630-167 PANTONE® 2945 C		<b>Jade Green</b> 3630-316		<b>Light Beige</b> 3630-149
	<b>Bristol Blue</b> 3630-97		<b>Dark Emerald Green</b> 3630-126 PANTONE® 3425 C		<b>Warm Beige</b> 3630-39
	<b>Sapphire</b> 3630-37		<b>Green</b> 3630-26 PANTONE® 7727 C		<b>Rust Brown</b> 3630-63 PANTONE® 7610 C
	<b>Marine Blue</b> 3630-287		<b>Holly Green</b> 3630-76 PANTONE® 7734 C		<b>Dark Brown</b> 3630-59
	<b>Twilight Blue</b> 3630-297		<b>KY Blue Grass</b> 3630-276		<b>Duranodic</b> 3630-69 PANTONE® Black 7 C
	<b>Infinity Blue</b> 3630-187		<b>Forest</b> 3630-196		<b>Silver</b> 3630-121 PANTONE® 877 C
	<b>European Blue</b> 3630-137 PANTONE® 2757 C		<b>Light Kelly Green</b> 3630-146 PANTONE® 340 C		<b>Gold Nugget</b> 3630-141
	<b>Glacial Green</b> 3630-56		<b>Vivid Green</b> 3630-156		<b>Gold Metallic</b> 3630-131 PANTONE® 872 C

## 3M™ Scotchcal™ Translucent Graphic Film Series 3630



**Dover White**  
3630-111



**White**  
3630-20



**Shadow Gray**  
3630-71  
PANTONE® Warm  
Gray 7 C



**Silver Gray**  
3630-51



**Slate Gray**  
3630-61



**Black**  
3630-22  
PANTONE®  
Black C

## Inkjet Printable Films and Overlaminates



**3M™ Scotchcal™  
Translucent  
Graphic Film**  
IJ3630-20



**3M™ Envision™  
Translucent  
Film**  
IJ3730-50



**3M™ Envision™  
Translucent  
Film**  
IJ3730-60



**3M™ Scotchcal™  
Transparent  
Graphic Film**  
IJ3650-114

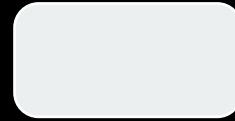


**3M™ Scotchcal™  
Gloss  
Overlaminate**  
3658G



**3M™ Scotchcal™  
Matte  
Overlaminate**  
3660M

## 3M™ Light Management Films



**Dual-Color  
White**  
3635-210



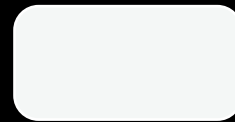
**Dual-Color  
Black**  
3635-222



**Dual-Color  
Sultan Blue**  
3635-157



**Chrome**  
3635-110



**White Blockout**  
3635-20B



**Black Blockout**  
3635-22B



**Day/Night  
Smoke Gray**  
3635-91



**Light  
Enhancement F  
White**  
3635-100

## Can't find your color?

Get the highest quality film in the color you want with our three-day, no charge color match service.

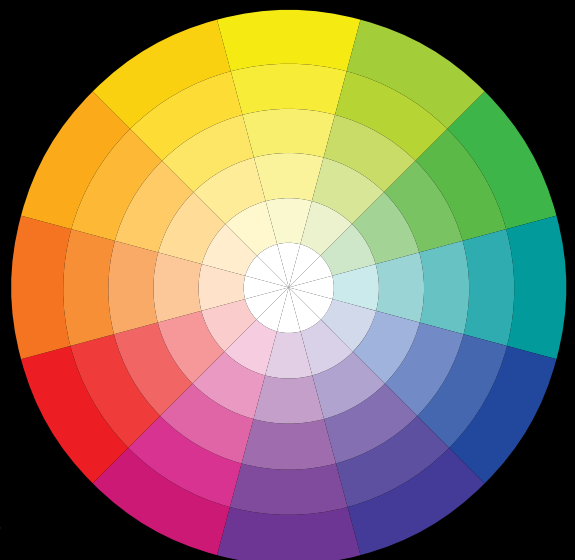
Can't find your color? No problem — we can custom match colors for you. Contact your local 3M distributor or sales representative to find out how easy it is to get the perfect film for your needs in the perfect color for your brand.

To learn more visit [3M.com/graphics](http://3M.com/graphics).

## Color matching steps:

1. Contact your 3M sales representative.
2. Provide Pantone®, RAL, or NCS color, or a physical sample.
3. Receive A4 sample of the matched color in about one week! Once the color is approved, 3M will begin to make the color shortly after ordering.

\*Minimum order quantities as low as 250 yards. Minimum quantities vary based on product and dimension.



# Flexible Substrates — available in roll widths

3M™ Flexible Substrates are a great lightweight signage and can be combined with a 3M™ Translucent Film and/or digitally printed. With widths available up to 5m wide, 3M flexible substrates can be a great option for signs of all sizes. 3M Flexible Substrates, along with other 3M films are covered as part of the 3M™ MCS™ Warranty.

For more information visit  
[3m.com/GraphicsWarranties](https://3m.com/GraphicsWarranties).



3M™ MCS™ Warranty



Platinum Patron



Authorized PANTONE Partner

Colors shown on a monitor and when printed are approximate representations of actual color available. Some of these products are a simulation of the closest PANTONE®-identified color standard. Consult current PANTONE Color Publications for accurate color.

## See your brand in a new light at [3M.com/IlluminatedSigns](https://3m.com/IlluminatedSigns).

Note that the elements used in sign construction, including sources of illumination, adhesives and substrates, can affect color. In most instances, color variation is slight, but certain elements will have a more noticeable effect, particularly on shades of white. PANTONE® color numbers are based on reflective light measurements of product samples applied to a standard white substrate.

### Warranty and Limited Liability.

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. 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 the film or media's Product Bulletin. Also see the 3M Graphics Warranties Bulletin, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

For warranty information, visit  
[3M.com/GraphicsWarranties](https://3m.com/GraphicsWarranties).



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