



## **Contents**

Large Format Graphics	 2
Architectural Finishes	 2
Backlit Signs	 3
Large Format Graphics	4
Lighting Solutions	 9

#### **Architectural Finishes**

## 3M™ Crystal Glass Finishes

Dusted and Frosted designs provide the look of sandblasted or etched glass, at a fraction of the cost. Digital printing on dusted materials offers both customization and personalization options.

These permanent, pressure-sensitive films have a transparent synthetic liner for easy cutting. They are available in a dusted crystal finish in translucent white (2 mil) or translucent frosted crystal finish (3.8 mil) in five colors.

These products are easy to apply and allow for the reuse of glass or window assets.

**Toll Free Number:** 1-888-650-3497

Website: www.3MArchitecturalMarkets.com

**LEED® Claim:** 

See www.3Marchitecturalmarkets.com for current LEED points available.

#### **Environmental/Energy Advantage:**

Use on exterior windows to reduce glare, natural daylight improves indoor aesthetics and may decrease the need for additional artificial lighting and energy consumption.



#### 3M<sup>™</sup> Fasara<sup>™</sup> Glass Finishes

3M<sup>TM</sup> Fasara Glass Finishes are decorative window films made from translucent polyester and provide personal privacy by obscuring the view through windows, glass partitions or doors. The films can be applied in a range of designs and now a multitude of patterns such as prism, stripe, frost or matte.

Aesthetics: Our decorative glass and window films transform plain glass, capturing the look of cut or textured glass to an astonishing degree at a fraction of the price.

Flexible: Fasara Glass Finishes allow you to tailor the amount of privacy a space possesses. Use Fasara Glass Finishes monolithically to create serene "ricepaper wall" effects, or die-cut or layer the films to create exciting, dynamic effects.

Easy application: 3M expertise in adhesives ensures you fast, accurate, beautiful and durable application to a variety of glass substrates.

Materials: Constructed from durable and flexible polyester materials.

**Toll Free Number:** 1-888-650-3497

Website: www.3MArchitecturalMarkets.com

**LEED® Claim:** 

See www.3Marchitecturalmarkets.com for current LEED points available.

#### **Environmental/Energy Advantage:**

Choose to use Fasara Glass Films to extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impact of new buildings as they relate to materials manufacturing and transport.

#### 3M™ DI-NOC™ Architectural Finishes

The 3M<sup>TM</sup> DI-NOC Architectural Finishes include over 500 designs to offer unlimited creativity and architectural freedom. Now you can create a multitude of visual experiences with the added assurance of 3M's time-proven experience. 3M<sup>TM</sup> DI-NOC Architectural Finishes are self adhesive, flexible, laminate films ideal for resurfacing and refurbishing smooth surfaces, including flat panels, doors, furniture, retail units. Easy and quick to use, 3M<sup>TM</sup> DI-NOC Architectural Finishes transform existing surfaces for amazing results. Additionally, its ability to mold around complex shapes means it can be used for curved and rounded profiles as well (See product bulletin).

**Toll Free Number:** 1-888-650-3497 **Website:** www.3MArchitecturalMarkets.com

**LEED® Claim:** 

See www.3MArchitecturalMarkets.com for current LEED points available.

#### **Environmental/Energy Advantage:**

With its variety of textures and patterns, use  $3M^{TM}$  DI NOC<sup>TM</sup> Films to give a totally new look and refreshing feel to existing building materials and products. Reusing existing stock of walls, doors and frames, built in case goods, furniture, etc. reduces the demand for virgin materials and reduces waste, thereby lessening the impacts associated with the extraction and processing of virgin resources.



#### 3M™ Primer WP-2000

3M<sup>TM</sup> Primer WP-2000 is especially designed for use with 3M<sup>TM</sup> DI-NOC<sup>TM</sup> Architectural Finishes at areas of extreme bending or porous substrates. It provides long term adhesion for permanent installations without the odor of solvent based primers.

**Toll Free Number:** 1-888-650-3497

Website: www.3MArchitecturalMarkets.com

**LEED® Claim:** 

Use of this product helps contribute to LEED® CI v2.0- EQ (Indoor Environmental Quality) Credit 4.2-Low emitting materials.

#### **Environmental/Energy Advantage:**

3M<sup>TM</sup> Primer WP-2000 is specially designed for areas requiring low VOC's. WP-2000 is a water based primer for application in areas of added stress that require extra bonding strength. WP-2000 has a VOC limit of 62 g/L, below the VOC limit of 350 g/L for specialty primers.

## **Backlit Signs**

#### 3M™ Envision™ Translucent and Diffuser Films

3M<sup>TM</sup> Envision<sup>TM</sup> Translucent and Diffuser Films are industry breakthroughs -- the first graphic films that optimize LED light. So now you can maximize the brightness of your sign, while saving on energy and maintenance costs. Also get rich, vibrantly colored signs with even illumination and no hot spots. Be more sustainable without sacrificing performance.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Most graphics using  $3M^{TM}$  Envision<sup>TM</sup> Translucent Films Series 3730 on diffuser film 3735-50 provide more light transmission than other graphics using  $3M^{TM}$  Scotchcal<sup>TM</sup> Translucent Film Series 3630 on  $3M^{TM}$  Diffuser Film 3635-30. See the Product Bulletin 3630/3730 for details.



#### 3M<sup>™</sup> Light Enhancement Film 3635-100

3M<sup>TM</sup> Light Enhancement Film 3635-100 is a 5.5 mil film with a patented matte white diffuse reflective surface. It provides more than 94% reflectivity for increased light output and greater sign luminance, improving lighting efficiency, which may result in energy savings. Use it to cover all interior opaque surfaces within single-sided, internally illuminated cabinets such as signs and light boxes, channel letters, informational graphic light boxes, vending and dispensing machines and more. It can be electronically cut and thermoformed. Refer to 3M Product Bulletin 3635-100 for complete details.

**Toll Free Number:** 1-800-328-3908 **Website:** www.3MGraphics.com

**LEED® Claim:** 

Use of this product helps comply with LEED®2009 NC- EA Prerequisite 2, (Minimum Energy Performance); EA Credit 1: (Optimize Energy Performance); CI- EA Prerequisite 2, (Minimum Energy Performance); EA Credit 1.1: (Optimize Energy Performance); CS- EA Prerequisite 2, (Minimum Energy Performance); EA Credit 1; EB O&M- EA Prerequisite 2, (Minimum Energy Performance); EA Credit 1.

#### **Environmental/Energy Advantage:**

Use of this film can eliminate painting and VOC emissions from the painting process. In addition, it increases available light to allow sign manufacturers to decrease lighting components, resulting in less energy use.



## 3M™ Scotchcal™ Translucent Graphic Films

3M<sup>TM</sup> Scotchcal<sup>TM</sup> Translucent Graphic Film Series 3630 is the ideal choice for internally-illuminated signs where crisp, clear colors (many with PANTONE® simulations) are required. This long-term, cast vinyl film has a clear, permanent, pressure-sensitive adhesive and a translucent synthetic liner that does not split if wet. The matte surface finish eliminates glare and provides a uniform color in both reflected and transmitted light. This film is thermoformable.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Use of graphic films instead of distortion screen printing or painting can eliminate VOC emissions and waste associated with these processes.



## Large Format Graphics

## 3M™ Envision™ Wrap Films

3M has invented a new graphic film technology that will change how you do business. We kept the 3M innovations you know and love: excellent print quality, slideability, snap-up (repositionability), heated film recovery, and Comply<sup>TM</sup> v3 Adhesive air release channels. Then we developed more. A lot more. Better conformability and lifting resistance. Even easier installs. Faster removals. With patent-pending 3M<sup>TM</sup> Envision<sup>TM</sup> Wrap Films, you can handle projects with confidence — no matter how challenging.

**Toll Free Number:** 1-800-328-3908

Website: www.3MGraphics.com/EnvisionWrap

**LEED® Claim:** 

Use of this film helps contribute to LEED® tCl v2.0 - MR credit 1.2, 1.3 (Building Reuse); Cl v2.0 - MR credit 3.1, 3.2, 3.3 (Resource Reuse); and LEED® NC v2.2 - MR 1.3, 3.1, 3.2 when used to make graphic films that can be used for refurbishment applications.

#### **Environmental/Energy Advantage:**

3M<sup>TM</sup> Envision<sup>TM</sup> Wrap Films are:

- Non-PVC
- Phthalate-free
- Made in part with bio-based materials
- Manufactured using 60% less solvent
- · Made without chlorine or other halogens added

For additional information on these environmental benefits, please visitwww.3MGraphics.com/Sustainability



#### 3M™ Scotchcal™ Paint Film

3M<sup>TM</sup> Scotchcal<sup>TM</sup> Paint Film is very flexible acrylic based graphics film for an exterior rough wall decoration. This film has an excellent conformability over rough wall substrates with only pressure. The inkjet printers are available to provide a digital graphics image. Durability is the same as current PVC film. Sold only in Japan.

Website: www.mmm.co.jp/cg/

#### **Environmental/Energy Advantage:**

Use of graphics films instead of paint can eliminate VOC emissions from the painting process. This is an acrylic film.

#### 3M™ Piezo Inkjet UV Inks

These UV curable inks are durable, weather resistant and have excellent color retention. They are flexible and conformable, even on complex curves and rivets.  $3M^{TM}$  Piezo Inkjet UV Inks are available for several digital printers and are backed by the  $3M^{TM}$  MCS<sup>TM</sup> Warranty. Please see our website for more details.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Use of UV inks can eliminate VOC emissions associated with solvent inks.



## 3M™ Scotchcal™ and Controltac™ Graphic Films, opaque

These films, which are available in vinyl, polyester or polyolefin, range in thickness from 2 to 4-mils. Selected films feature Comply™ Adhesive technology to enable fast and easy, bubble-free graphic installation. These opaque films have excellent hiding power and have medium to long term durability, making them perfect for many interior and exterior signs, fleet and vehicle graphics. Two-mil films are flexible enough for application to corrugations and rivets. Always refer to the film's Product Bulletin for complete details.

Toll Free Number: 1-800-328-3908
Website: www.3MGraphics.com
Environmental/ Energy Advantage:

Use of graphic films instead of paint can eliminate VOC emissions from the painting process. Many graphic films meet flammability performance requirements for building and transit applications.



#### 3M™ Scotchcal™ ElectroCut™ Graphic Film

These 2 to 4-mil cast vinyl films are available in many colors and finishes such as dusted and frosted crystal, fluorescent and translucent colors, The synthetic liner resists moisture absorption and static buildup for easier electronic cutting and assembly. All are suitable for cut graphics and application to transparent, opaque or reflective films and substrates. Some can also be screen printed. Use for commercial and industrial graphic applications, including emblems, vehicle graphics, labels, striping, general signage and two-way window markings.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Signs can be produced with minimal solvent exposure to sign shop personnel and without the generation of hazardous waste.  $3M^{TM}$  Scotchcal<sup>TM</sup> ElectroCut<sup>TM</sup> Graphic Film eliminates the use of solvent-containing screen printing inks.



#### 3M™ Scotchcal™ Film VF8000SCL and VF3000SCL Series

3M<sup>TM</sup> Scotchcal<sup>TM</sup> Film series VF8000SCL and VF3000SCL is a 2-mil colored urethane film with a self cleaning (SCL) surface. This film provides a colored film alternative to paint for an outdoor signage market. VF8000SCL is opaque marking film and VF3000SCL is transparent marking film for backlit signage. Sold only in Japan.

Website: www.mmm.co.jp/cg/

#### **Environmental/Energy Advantage:**

Use of graphic films instead of paint can eliminate VOC emissions from the painting process. This graphic film meets flammability performance requirements for certain building and transit applications. In addition it can reduce cleaning time because of a self-cleaning surface.



## 3M™ Screen Printing UV Inks and 3M™ Screen Printing UV Clears

3M<sup>TM</sup> Screen Printing UV Inks are high performance, ultraviolet-curable ink systems used to print multicolor graphics on a wide variety of 3M graphic films. Available inks include transparent, opaque and four color process inks for use on indoor or outdoor graphics. When protected with selected 3M clears, these inks produce tough, flexible, graphic coatings that are weather, chemical and abrasion resistant. They also have superior performance on difficult application surfaces, including corrugated and riveted surfaces. Refer to 3M Product Bulletins for complete details.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Use of UV inks can eliminate VOC emissions associated with solvent inks.



### IJ5363 Polyester-based Inkjet Media

IJ5363 Polyester-based Inkjet Media is a graphic media for solvent inkjet systems. This product has a ink receptor layer for solvent inks. The high gloss appearance and highly transparent feature allow this film to be applied onto glass surfaces. It is also removable from glass for short-term application. This product is to be used together with IJ4121 overlaminating film with solvent inkjet system. Sold only in Japan.

Website: www.mmm.co.jp/cg/ Environmental/ Energy Advantage:

This is a polyester film.

# 3M<sup>™</sup> Controltac<sup>™</sup> Graphic Film Series 180 and 3M<sup>™</sup> Scotchcal<sup>™</sup> Overlaminate 639

The combination of 3M<sup>TM</sup> Controltac<sup>TM</sup> Graphic Film Series 180 and 3M<sup>TM</sup> Scotchcal<sup>TM</sup> Overlaminate 639 can be used instead of, or in addition to, a paint surface finishing on rail carriages and other vehicles. 3M<sup>TM</sup> Controltac<sup>TM</sup> Graphic Film Series 180 includes more than 60 colors, with a range of colored films with a pressure activated adhesive for fast and easy application. Custom colors can be matched to your specification. 3M<sup>TM</sup> Scotchcal<sup>TM</sup> Overlaminate 639 protects against the damaging effects of graffiti. It is easily cleaned without causing ghosting.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

Use of graphic films instead of paint can eliminate VOC emissions from the painting process. In addition it can be applied in situ and does not require the transportation of the vehicle to a paint facility. Cleaning graffiti from  $3M^{TM}$  Scotchcal<sup>TM</sup> 639 also requires less harsh cleaning agents.



# 3M<sup>™</sup> Controltac<sup>™</sup> Graphic Film with Comply<sup>™</sup> Adhesive 3545C and 3M<sup>™</sup> Scotchcal<sup>™</sup> Overlaminates 8908 and 8909

3M<sup>TM</sup> Controltac<sup>TM</sup> Graphic Film with Comply<sup>TM</sup> Adhesive Film 3545C is a 4-mil film with a slideable and repositionable, pressure-activated adhesive with air release channels for fast and easy application. These films, which are removable, are ideal for medium-term graphics for fleet or commercial vehicles and indoor or outdoor graphic applications. They are designed for screen printing, piezo inkjet printing and electrostatic imaging. Overlaminates provide indoor and outdoor graphics protection against the elements, including defense against damaging UV rays. Overlaminate 8908 has a luster finish and overlaminate 8909 has a matte finish.

**Toll Free Number:** 1-800-328-3908 **Website:** www.3MGraphics.com

**LEED® Claim:** 

When used for refurbishment applications, use of this product helps contribute to LEED® CI v2.0- MR credit 1.2, 1.3 (Building Reuse); CI v2.0- MR credit 3.1, 3.2, 3.3 (Resource Reuse); and LEED® NC v2.2-MR 1.3, 3.1, 3.2. Refer to 3M Product and Instruction Bulletins for recommended end uses and instructions on how to process and apply graphic film.

#### **Environmental/Energy Advantage:**

Use of graphic films instead of paint can eliminate VOC emissions from the painting process. These graphic films meet flammability performance requirements for certain building and transit applications. These are polyolefin films.



## 3M™ Controltac™ Graphic Film AF1000ES

3M<sup>TM</sup> Controltac<sup>TM</sup> Graphic Film AF1000ES is a 2-mil film made of a durable and flexible acrylic material. It provides multi-printable graphics (electrostatic and silk screen printing) film for an outdoor sign market. Durability is the same as current cast PVC films. This film has excellent conformability over corrugations and rivets. Sold only in Japan.

Website: www.mmm.co.jp/cg/

#### **Environmental/Energy Advantage:**

Use of graphic films instead of paint can eliminate VOC emissions from the painting process. This graphic film meets flammability performance requirements only with overlaminate film SP4114 or IJ4114 for certain building and transit applications.



# 3M<sup>™</sup> Scotchlite<sup>™</sup> Removable Reflective Graphic Film with Comply<sup>™</sup> Adhesive Series 680CR

These are 7-mil, flexible, enclosed lens, retroreflective films have slideable, pressure-activated adhesive. They feature Comply<sup>TM</sup> Adhesive technology with air release channels for fast and easy, bubble-free graphic installations. Use these medium to long-term durable films for commercial vehicle, railroad and sign graphics and striping on vertical, flat, curved or corrugated surfaces, with or without rivets.

Toll Free Number: 1-800-328-3908 Website: www.3MGraphics.com Environmental/ Energy Advantage:

The product is imaged with a low-solvent process when used with  $3M^{\rm TM}$  Series 9800UV inks. Retroreflectivity increases visibility.



## 3M™ High Luminance Light Fiber

3M<sup>TM</sup> High Luminance Light Fiber is an especially brilliant type of fiber that creates a bright, visually uniform effect (See product bulletin). Features include: compliments neon and LED chip strips, high durability- resists breakage, fiber is flexible, design flexibility with clean appearance, ideal for indoor and outdoor applications, remote light source, cool to touch, no electrical hazard along fiber, low voltage alternatives, easy to change light source.

**Toll Free Number:** 1-888-650-3497 **Website:** www.3MArchitecturalMarkets.com

#### **Environmental/Energy Advantage:**

When paired with energy efficient solid state light sources,  $3M^{TM}$  High Luminance Light Fiber offers opportunity for energy savings over traditional light sources.  $3M^{TM}$  High Luminance Light Fiber is a more environmentally preferable solution than fluorescent or neon lights because it contains no mercury or heavy metals. Furthermore,  $3M^{TM}$  High Luminance Light Fiber is safer for use in public areas that are sensitive to glass breakage from traditional light sources.



## 3M™ Daylighting Radial Lens Film DRLP22

3M<sup>TM</sup> Daylighting Radial Lens Film DRLP22 is a continuous web of 4-inch square UV-stabilized polycarbonate lenses. On one side are optical-quality circular prisms 0.0008 inches in depth. The other side of the 0.022-inch film has a smooth finish. The lenses are designed to capture sunlight from a wide range of angles and uniformly distribute the light from its lens surface to an interior space. The unique lens design reduces glare and eliminates hot spots, and because of the optical grade plastic used, the film does not alter the colors of the transmitted light. A majority of the light is contained in a cone angle of 90 degrees. This feature allows lighting designers to efficiently illuminate floor areas and maintain adequate ambient levels on the walls (See product bulletin).

**Toll Free Number:** 1-888-650-3497 **Website:** www.3MArchitecturalMarkets.com

**LEED® Claim:** 

See www.3MArchitecturalMarkets.com for current LEED points available.

#### **Environmental/Energy Advantage:**

This product is extremely efficient at reflecting visible wavelengths of light and can increase the efficiency of lighting or the use of daylight. Using this product to efficiently transfer daylight to the building interior, can reduce the energy required for lighting as well as improving the quality of the environment.



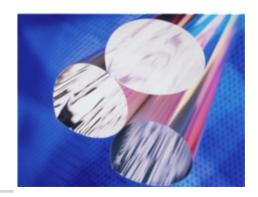
### 3M<sup>™</sup> Daylighting Film DF2000PE

3M<sup>TM</sup> Daylighting Film DF2000PE is a polymeric film providing specular reflection with greater than 99% luminous reflectivity for wavelengths from 400 nm to 775 nm (visible light). This high rate of reflectivity is especially important in applications where light is transferred or directed through multiple reflections. For example, when directing daylight down a duct or a tube with 20 points of reflection, going from 99 to 98% reflectivity (a 1% decrease) will cause a decrease in light output of up to a 20%. This metal-free, non-corroding and non-conducting film is well-suited for daylighting applications. It has a pressure sensitive adhesive for a secure bond and a polyethylene liner to protect its reflective surface during installation (See product bulletin).

**Toll Free Number:** 1-888-650-3497 **Website:** www.3MArchitecturalMarkets.com

#### **Environmental/Energy Advantage:**

This product is extremely efficient at reflecting visible wavelengths of light and can increase the efficiency of lighting or the use of daylight. Using this product to efficiently transfer daylight to the building interior can reduce the energy required for lighting as well as improving the quality of the environment.



## Product Index

Product	Page
3M™ Controltac™ Graphic Film AF1000ES	8
3M™ Controltac™ Graphic Film Series 180 and 3M™ Scotchcal™ Overlaminate 639	7
3M™ Controltac™ Graphic Film with Comply™ Adhesive 3545C and 3M™ Scotchcal™ Overlaminates 8908 and 8909	7
3M™ Crystal Glass Finishes	2
3M™ Daylighting Film DF2000PE	9
3M™ Daylighting Radial Lens Film DRLP22	9
3M™ DI-NOC™ Architectural Finishes	3
3M™ Envision™ Translucent and Diffuser Films	
3M™ Envision™ Wrap Films	4
3M™ Fasara™ Glass Finishes	2
3M™ High Luminance Light Fiber	9
3M™ Light Enhancement Film 3635-100	4
3M™ Piezo Inkjet UV Inks	5
3M™ Primer WP-2000	
3M™ Scotchcal™ and Controltac™ Graphic Films, opaque	5
3M™ Scotchcal™ ElectroCut™ Graphic Film	6
3M™ Scotchcal™ Film VF8000SCL and VF3000SCL Series	6
3M™ Scotchcal™ Paint Film	5
3M™ Scotchcal™ Translucent Graphic Films	4
3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive Series 680CR	8
3M™ Screen Printing UV Inks and 3M™ Screen Printing UV Clears	6
LIF363 Polyactor based Inkiet Media	7





Corporate Headquarters 3M Center St. Paul, MN 55144-1000 www.3M.com/sustainability 3M, Diamond Grade, Controltac, Scotchcal, Comply, ElectroCut, Envision are registered trademarks of 3M. LEED® is a registered service mark owned by the U.S. Green Building Council (USGBC). The USGBC is not affiliated with 3M Company. Products are not reviewed or certified under the LEED Rating System. LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products or brands. For more information on LEED, visit <a href="https://www.usgbc.org/leed">www.usgbc.org/leed</a>.

All other trademarks are property of their respective owners.
Please recycle.

© 3M 2013. All rights reserved.