

## 3M Graphics Market

Product Catalog

Inkjet Printing Materials and Solid Color Films

August 2015





# The Surface Just the

## Innovations that Move an Industry

3M believes in helping companies build and protect their brands. That's why for more than 50 years 3M has been trusted by the world's largest companies to provide practical products that help companies succeed. Our track record of innovation and partnership in the visual communications industry means one thing: you can count on us to help you grow your business.

## Products that Perform

3M customers dare to lead the industry because they know they can rely on our products' performance. 3M uses the industry's most rigorous tests to ensure our products work with all related system components to produce graphics of unsurpassed quality, consistency and durability. Our comprehensive warranties prove our level of confidence.

## Technology that Advances Your Business

Relentlessly pursuing new ideas is in 3M's DNA. Our research and development teams, combined with our 40+ technology platforms, are a powerful force of ingenuity that consistently creates new opportunities for the industry and your business's growth.





# is Beginning



## Comprehensive Solutions

### Greater versatility

- Turn almost any surface into a brand-building environment
- Satisfy a variety of customer requirements and budgets

*3M™ Envision™, Scotchcal™, Controltac™ and Scotchlite™ Films*

### Faster installation and removal

- Increase productivity with fewer failures using the 3M patented adhesive system, films and application tools
- Benefit from easy, bubble-free installation for challenging applications

*3M™ Envision™ and Controltac™ Graphic Films with Comply™ v3 Adhesive*

### Good looks that last longer

- Offer customers a variety of graphic protection options such as graffiti protection, slip-resistance and gloss retention
- Gain the quality advantage of having high conformability, flexibility, durability and preferred finish

*3M™ Envision™ and Scotchcal™ Overlaminates and 3M™ Clear Coats*

- Provide the confidence of having the longest outdoor durability and most flexible inkjet ink solutions

*3M™ Digital Inks*

### Greener options

- Offer environmentally-friendly products that don't sacrifice performance
- Use leading-edge technology that's transforming the industry
- Help your customers use less energy or earn LEED® credits
- Look for these products identified with a leaf



Greener Solutions

### Greater visibility










- Ensure your customers increase their impressions with greater nighttime visibility
- Deliver the assurance of being seen

*3M™ Scotchlite™ Reflective Graphic Films*



# Applications at a Glance

## Inkjet Media

| Number   | IJ Media<br>(IJ = forward wound, unnotched core)                      | APPLICATIONS   |                                     |                                     |                                     |                                     |                                     |                                     |                                     |                                     |                                     |                                     | DESCRIPTION  |   |
|--|---|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|---|
|  |   | Fleet (commercial trailer, truck, tractor) and Vehicle Graphics* | Vehicle Wraps                       | Watercraft                          | Transit (bus, passenger train)      | Label (warning, informational)      | Signage – Backlit                   | Signage – Non-Backlit               | Awning                              | Smooth Walls                        | Textured Walls and Surfaces         | Window or Glass                     |  | Recommended Graphic Protection  |
|  <b>SV480Cv3</b>                         | 3M™ Envision™ Print Wrap Film SV480Cv3                                | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | A revolutionary, non-PVC film with a breakthrough boost in performance. Outperforms films IJ180Cv3, IJ380Cv3 and IJ8624. <b>For solvent/eco solvent and UV printers.</b>   | 8518, 8519, 8520, 8528, 8548G, 8549L, 8915, 1920DR, 9740i                   |
|  <b>LX480Cv3</b>  | 3M™ Envision™ Print Wrap Film LX480Cv3                                | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | A revolutionary, non-PVC film with a breakthrough boost in performance. Outperforms films IJ180Cv3, IJ380Cv3 and IJ8624. <b>For latex and UV printers.</b>   | 8518, 8519, 8520, 8528, 8548G, 8549L, 8915, 1920DR, 9740i                   |
| <b>IJ380Cv3</b>  | 3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3           | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Excellent conformability and lifting resistance on wraps when using a solvent inkjet printer.  | 8548G, 8549L, 1920DR  |
| <b>IJ180C</b>  | 3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C             | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | The classic vehicle wrap film with the original 3M™ Comply™ Adhesive technology.   | 1920DR, 8548G, 8549L, 8518, 8519, 8520, 8528, 8530, 8908, 8909, 8915, 9740i |
| <b>IJ180Cv3</b>  | 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3        | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Industry standard for vehicle and boat graphics providing air release, snap-up, slideability and removeability.  | 8518, 8519, 8520, 8528, 8530, 8908, 8909, 8915, 9740i                       |
| <b>IJ180</b>   | 3M™ Controltac™ Graphic Film IJ180                                    | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Used for large wall murals providing easy installation and reliable adhesion.  | 1920DR, 8518, 8519, 8520, 8908, 8909, 8915, 9740i                           |
| <b>IJ181</b>   | 3M™ Controltac™ Graphic Film IJ181                                    | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Designed for use on stainless steel applications.  | 1920DR, 8518, 8519, 8520, 8908, 8909, 8915, 9740i                           |
| <b>IJ170Cv3</b>  | 3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3         | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Value priced solution with Comply™ Adhesive v3 air release system for vehicle graphics.  | 1920DR, 8548G, 8549L, 8518, 8519, 8520, 8528, 8530, 8908, 8909, 8915, 9740i |
| <b>IJ8150</b>  | 3M™ Scotchcal™ Clear View Graphic Film IJ8150                         | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Optical clarity in a printable, durable film.  | 8518, 8519, 8520, 8528, 8914, 8915, 1920DR, 9740i                           |
| <b>IJ3552C</b>   | 3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | The ultimate in removability. Use this for short-term vehicle wraps when you still need slideability, repositionability and air release.   | 1920DR, 8518, 8519, 8520, 8915, 9740i                                       |
|  <b>8170-P40</b> <br><b>8170-P50</b> | 3M™ Scotchcal™ Perforated Window Graphic Film 8170-P40 and 8170-P50   | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Great conformability and durability on vehicle and building windows. Only cast window films on the market. 8170-P50 has 50% perforation and 8170-P40 has 40% perforation.  | 8518, 8914  |
| <b>IJ8624</b>  | 3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624              | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Designed for use on textured surfaces like brick, industrial stucco and cinderblock when inkjet solvent printing.  | 8524  |
| <b>IJ3630-20</b>   | 3M™ Scotchcal™ Translucent Graphic Film IJ3630-20                     | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Create vibrant backlit graphics with this durable translucent film.  | 1920DR, 3619, 3620, 8518, 8519, 8520, 3658G, 3660M, 8915, 9740i             |
|  <b>IJ3730</b>  | 3M™ Envision™ Translucent Film IJ3730-50 and IJ3730-60                | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Translucent film optimized for use with LEDs. Maximizes light transmission for brighter graphics in illuminated signs.   | 1920DR, 3619, 3620, 3658G, 3660M, 8518, 8519, 8520, 8915, 9740i             |
| <b>IJ3650-10</b>   | 3M™ Scotchcal™ Graphic Film IJ3650-10                                 | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Reliable permanent cast film for long-term signs and graphics.   | 1920DR, 3619, 3620, 3658G, 3660M, 8518, 8519, 8520, 8915, 9740i             |
| <b>IJ3650-114</b>  | 3M™ Scotchcal™ Graphic Film IJ3650-114                                | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Reverse image on this clear film for second surface graphics.  | 1920DR, 8518, 8519, 8520, 8915, 9740i                                       |
| <b>IJ160C</b>  | 3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C             | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Great for short-term vehicle graphics that demand slideability, repositionability and bubble-free installation.  | 1920DR, 8518, 8519, 8520, 8528, 8530, 8915, 9740i                           |
| <b>IJ160</b>   | 3M™ Controltac™ Graphic Film IJ160                                    | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Great for flat application graphics that require slideability.   | 1920DR, 8518, 8519, 8520, 8908, 8909, 8915                                  |
|  <b>3545C</b>   | 3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C    | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Environmentally friendly polyolefin film with no polyvinylchloride or monomeric plasticizers in its construction and made with less solvent in manufacturing when compared to traditional solvent-based adhesive products. | 1920DR, 8518, 8519, 8520, 8908, 8909, 8915                                  |
| <b>IJ3555</b>  | 3M™ Scotchcal™ Changeable Graphic Film IJ3555                         | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | The ultimate in removability. Use this film for short-term promotional graphics.   | 1920DR, 8518, 8519, 8520, 8530, 8915, 9740i                                 |
| <b>IJ162-10</b>  | 3M™ Controltac™ Graphic Film IJ162-10                                 | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Create eye-catching floor graphics with this reliable and safe floor graphic product.  | 3645, 3648  |
| <b>Panagraphics III</b>  | 3M™ Panagraphics™ III Wide Width Flexible Substrate                   | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Wide width substrate for many types of signs.  | 3619, 3620, 3658G, 3660M, 8518, 8519, 8520                                  |
|  <b>FS-1</b>                         | 3M™ Envision™ Flexible Substrate FS-1                                 | <input checked="" type="checkbox"/>                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | The flexible substrate optimized for use with LEDs.  | 3619, 3620, 3658G, 3660M, 8518, 8520  |



\* Film IJ8150 is only recommended for use on windows for this application.










3M products are designed with our printing partners in mind.

# Reflective Media

| Reflective Media |   | APPLICATIONS  |               |            |                                |                                |                   |                                    |                       |        |        |              |                             |                  | DESCRIPTION  |  |   |
|------------------|---|---|---------------|------------|--------------------------------|--------------------------------|-------------------|------------------------------------|-----------------------|--------|--------|--------------|-----------------------------|------------------|--|--|---|
|                  |   | Fleet (commercial trailer, truck, tractor) and Vehicle Graphics | Vehicle Wraps | Watercraft | Transit (bus, passenger train) | Label (warning, informational) | Signage – Backlit | Signage – Backlit and Thermoformed | Signage – Non-Backlit | Awning | Banner | Smooth Walls | Textured Walls and Surfaces | Windows or Glass | Floor  |   |  |
| Number           | Product   |   |               |            |                                |                                |                   |                                    |                       |        |        |              |                             |                  |  |  |   |
| IJ680CR          | 3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive IJ680CR | ■   |               |            | ■                              | ■                              |                   |                                    | ■                     |        |        |              |                             |                  |  | Leading reflective film with slideability, air release and removability for easier, faster, bubble-free installations and removal. | 1920DR, 8518, 8519, 9740i   |
| IJ680            | 3M™ Scotchlite™ Reflective Graphic Film IJ680                                   | ■   |               |            | ■                              | ■                              |                   |                                    | ■                     |        |        |              |                             |                  | Industry standard reflective film features slideability and increases graphic impressions by offering 24/7 visibility. |  |   |
| IJ5100R          | 3M™ Scotchlite™ Reflective Graphic Film IJ5100R                                 | ■   |               |            | ■                              | ■                              |                   |                                    | ■                     |        |        |              |                             |                  | Removable reflective graphic film is ideally suited for cut letters, decals, vehicle markings and non-regulated signs. |  |   |
| IJ5100           | 3M™ Scotchlite™ Reflective Graphic Film IJ5100                                  | ■   |               |            | ■                              | ■                              |                   |                                    | ■                     |        |        |              |                             |                  | Permanent, engineer grade reflective film designed for excellent cutting and weeding.                                  |  |   |
| IJ5000           | 3M™ Scotchlite™ Reflective Graphic Film IJ5000                                  | ■   |               |            |                                | ■                              |                   |                                    | ■                     |        |        |              |                             |                  | Perfect reflective film choice for short-term messages.  |  |   |










# Overlaminates for Protection of Inkjet Printed Media

|   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | <b>8549L</b>  | 3M™ Envision™ Luster Wrap Overlaminate 8549L     | ■ | ■ | ■ | ■ |   |   | ■ |   |   | ■ | ■ | ■ |   | Goes beyond being just non-PVC, with a breakthrough boost in performance. Outperforms overlaminates 8519, 8524 and 8528.  |
|  | <b>8548G</b>   | 3M™ Envision™ Gloss Wrap Overlaminate 8548G      | ■ | ■ | ■ | ■ |   |   | ■ |   |   | ■ | ■ | ■ |   | Goes beyond being just non-PVC, with a breakthrough boost in performance. Outperforms overlaminates 8518, 8524 and 8528.  |
|   | <b>3658G</b>   | 3M™ Scotchcal™ Gloss Overlaminate 3658G          |   |   |   |   |   | ■ | ■ | ■ | ■ |   |   |   |   | High protection from UV fading, dirt, easy to clean; thermoformable on plastic substrates; use on translucent films 3630 and 3730; and digital or screen printed Envision FS-1 and Panagraphics III substrates.                           |
|   | <b>3660M</b>   | 3M™ Scotchcal™ Matte Overlaminate 3660M          |   |   |   |   |   | ■ | ■ | ■ | ■ |   |   |   |   | Matte version of 3658G.   |
|   | <b>8528</b>  | 3M™ Scotchcal™ Gloss Overlaminate 8528           | ■ | ■ | ■ | ■ |   |   | ■ |   |   |   |   |   |   | A highly durable overlaminate. Lasting protection from UV light and acid dew.   |
|   | <b>8518</b>  | 3M™ Scotchcal™ Gloss Overlaminate 8518           | ■ | ■ | ■ | ■ | ■ | ■ | ■ |   | ■ | ■ |   | ■ |   | Offers high gloss in a highly conformable overlaminate. Ideal for vehicle wraps to achieve the wet paint look.  |
|   | <b>8519</b>  | 3M™ Scotchcal™ Luster Overlaminate 8519          | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |   |   |   | Industry standard for a flexible, conformable cast overlaminate.  |
|   | <b>8520</b>  | 3M™ Scotchcal™ Matte Overlaminate 8520           | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |   |   |   | Matte finish is perfect for indoor use or to provide a unique look to vehicle wraps.  |
|   | <b>8524</b>  | 3M™ Scotchcal™ Luster Overlaminate 8524          |   |   |   |   |   |   |   |   |   |   | ■ |   |   | Designed to protect graphics made with film IJ8624 for textured surfaces.   |
|   | <b>8914</b>  | 3M™ Scotchcal™ Optically Clear Overlaminate 8914 | ■ | ■ |   | ■ |   |   |   |   |   |   |   | ■ |   | Use on window graphics made with film 8170-P40, 8170-P50, IJ8150 where optical clarity is required.   |
|   | <b>8915</b>  | 3M™ Scotchcal™ Ultra-Matte Overlaminate 8915     |   | ■ | ■ |   |   | ■ | ■ |   |   | ■ |   |   |   | Provides the ultimate matte finish.   |
|  | <b>8908</b>  | 3M™ Scotchcal™ Luster Overlaminate 8908          | ■ |   |   | ■ |   |   | ■ |   |   | ■ |   | ■ |   | Environmentally friendly polyolefin film with no polyvinylchloride or monomeric plasticizers in its construction and made with less solvent in manufacturing when compared to traditional solvent-based adhesive products. Luster finish. |
|  | <b>8909</b>  | 3M™ Scotchcal™ Matte Overlaminate 8909           | ■ |   |   | ■ |   |   | ■ |   |   | ■ |   | ■ |   | Environmentally friendly polyolefin film with no polyvinylchloride or monomeric plasticizers in its construction and made with less solvent in manufacturing when compared to traditional solvent-based adhesive products. Matte finish.  |
|   | <b>3645</b>  | 3M™ Scotchcal™ Luster Overlaminate 3645          |   |   |   |   |   |   |   |   |   |   |   |   | ■ | Slip-resistant overlaminate designed specifically for floor graphics but used for table-top graphics as well.   |
|   | <b>3619</b>  | 3M™ Scotchcal™ Luster Overlaminate 3619          |   |   |   |   |   | ■ | ■ | ■ |   |   |   |   |   | Luster finish overlaminate for digitally imaged backlit sign faces.   |
|   | <b>3620</b>  | 3M™ Scotchcal™ Matte Overlaminate 3620           |   |   |   |   |   | ■ | ■ | ■ |   |   |   |   |   | Matte finish overlaminate for digitally imaged backlit sign faces.  |

For complete product details and warranted applications, go to [3mgraphics.com/TechInfo](http://3mgraphics.com/TechInfo)

# High Performance Products — Film Characteristics

## Inkjet Media

| <div>Inkjet Media</div>   |  |   | DURABILITY AND WARRANTIES |  |   | APPLICATION SURFACES |                       |      |                  |            |               |                 |                                    | FILM CHARACTERISTICS     |                            |               |                  |                       |                                    |        |             |
|---|--|---|---------------------------|--|---|----------------------|-----------------------|------|------------------|------------|---------------|-----------------|------------------------------------|--------------------------|----------------------------|---------------|------------------|-----------------------|------------------------------------|--------|-------------|
|   |  |   |                           |  |   |                      |                       |      |                  |            |               |                 |                                    | FACE CHARACTERISTICS     |                            |               |                  | FILM OPACITY          |                                    |        |             |
|   |  |   | Number                    | IJ Media<br>(IJ = forward wound, unnotched core) | Expected Performance Life, Unprinted (Years)† | 3M™ MCS™ Warranty    | Performance Guarantee | Flat | Flat with Rivets | Corrugated | Simple Curves | Compound Curves | Deep Channels and Concave Surfaces | Flexible Substrates      | Textured Wall and Surfaces | Film Material | Cast or Non-Cast | Film Thickness (mils) | Face Finish (Gloss, Luster, Matte) | Opaque | Translucent |
|    | <b>SV480Cv3</b>                       | 3M™ Envision™ Print Wrap Film SV480Cv3                                | 11                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | High Performance non-PVC | High Performance non-PVC   | 2             | L                | ■                     |                                    |        |             |
|    | <b>LX480Cv3</b>  | 3M™ Envision™ Print Wrap Film LX480Cv3                                | 11                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | High Performance non-PVC | High Performance non-PVC   | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ380Cv3</b>  | 3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3           | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ180C</b>  | 3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C             | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ180Cv3</b>  | 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3        | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ180</b>   | 3M™ Controltac™ Graphic Film IJ180                                    | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ181</b>   | 3M™ Controltac™ Graphic Film IJ181                                    | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ170Cv3</b>  | 3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3         | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ8150</b>  | 3M™ Scotchcal™ Clear View Graphic Film IJ8150                         | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | G                |                       |                                    | ■      |             |
|   | <b>IJ3552C</b>   | 3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C | 8                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>8170-P40</b> <br><b>8170-P50</b> | 3M™ Scotchcal™ Perforated Window Graphic Film 8170-P40 and 8170-P50   | 3                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 4             | G                | ■                     |                                    |        | ■           |
|   | <b>IJ8624</b>  | 3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624              | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ3630-20</b>   | 3M™ Scotchcal™ Translucent Graphic Film IJ3630-20                     | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | M                |                       | ■                                  |        |             |
|  | <b>IJ3730-50</b>   | 3M™ Envision™ Translucent Film IJ3730-50                              | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | M                |                       | ■                                  |        |             |
|  | <b>IJ3730-60</b>   | 3M™ Envision™ Translucent Film IJ3730-60                              | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | M                |                       | ■                                  |        |             |
|   | <b>IJ3650-10</b>   | 3M™ Scotchcal™ Graphic Film IJ3650-10                                 | 10                        | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                | ■                     |                                    |        |             |
|   | <b>IJ3650-114</b>  | 3M™ Scotchcal™ Graphic Film IJ3650-114                                | 8                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Cast                       | 2             | L                |                       |                                    | ■      |             |
|   | <b>IJ160C</b>  | 3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C             | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Non-Cast                   | 4             | M                | ■                     |                                    |        |             |
|   | <b>IJ160</b>   | 3M™ Controltac™ Graphic Film IJ160                                    | 7                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Non-Cast                   | 4             | M                | ■                     |                                    |        |             |
|  | <b>3545C</b>   | 3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C    | 3                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Polyolefin               | Non-Cast                   | 4             | M                | ■                     |                                    |        |             |
|   | <b>IJ3555</b>  | 3M™ Scotchcal™ Changeable Graphic Film IJ3555                         | 2                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Non-Cast                   | 4             | M                | ■                     |                                    |        |             |
|   | <b>IJ162-10</b>  | 3M™ Controltac™ Graphic Film IJ162-10                                 | 1                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | Non-Cast                   | 4             | M                | ■                     |                                    |        |             |
|   | <b>Panagraphics III</b>  | 3M™ Panagraphics™ III Wide Width Flexible Substrate                   | 6                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | —                          | 20            | L                |                       | ■                                  |        |             |
|  | <b>FS-1</b>                         | 3M™ Envision™Flexible Substrate FS-1                                  | 6                         | ■  | ■   | ■                    | ■                     | ■    | ■                | ■          | ■             | ■               | ■                                  | Vinyl                    | —                          | 20            | L                |                       | ■                                  |        |             |

† Maximum expected outdoor durability of unprinted films. For actual warranties of specific film, ink and overlaminate combinations, refer to the warranty matrices in the appropriate base film 3M Product Bulletin.



3M products are designed with our printing partners in mind.

| ADHESIVE CHARACTERISTICS |                    |                    |  |  |  |               |           |            | IMAGING METHOD              | CUTTING METHOD | LINER          | CORE             | AVAILABILITY   |                    |          |                           |                   |                        |                                |  |
|--------------------------|--------------------|--------------------|--|--|--|---------------|-----------|------------|-----------------------------|----------------|----------------|------------------|----------------|--------------------|----------|---------------------------|-------------------|------------------------|--------------------------------|--|
| COLOR                    | FEATURES           |                    |  |  |  | REMOV-ABILITY |           |            |                             |                |                |                  |                |                    |          |                           |                   |                        |                                |  |
| Adhesive Color           | Pressure-Sensitive | Pressure-Activated | Pressure-Sensitive with Non-visible Air Release Channels | Pressure-Activated with Air Release Channels | Pressure-Activated with Non-Visible Air Release Channels | Permanent     | Removable | Changeable | Inkjet – Solvent/ecoSolvent | Inkjet – UV    | Inkjet – Latex | Inkjet – Aqueous | Electronic Cut | Kiss Cut & Die Cut | Hand Cut | Polyethylene-coated Paper | Polyester Layflat | Core Sizes (in inches) | Roll Widths (in inches)        | Roll Lengths (in yards unless otherwise specified) |
| Gray                     |                    |                    |  |  | ■  |               | ■         |            | ■                           | ■              |                |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54                         | 25/50/100/150/200                                  |
| Gray                     |                    |                    |  |  | ■  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54                         | 25/50/100/150/200                                  |
| Gray                     |                    |                    |  |  | ■  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3                      | 54                             | 25/50  |
| Gray                     |                    |                    |  | ■  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 36, 48, 54, 60             | 25/50/100/150/200                                  |
| Gray                     |                    |                    |  |  | ■  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 36, 48, 54, 60             | 25/50/100/150/200                                  |
| Gray                     |                    | ■                  |  |  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 36, 48, 54, 60             | 25/50/100/150/200                                  |
| Gray                     |                    | ■                  |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48                             | 25/50/100/150/200                                  |
| Gray                     |                    |                    | ■  |  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■*             | ■                  | ■        | ■                         | ■                 | 3, 6                   | 54, 60                         | 25/50/100/150/200                                  |
| Clear                    | ■                  |                    |  |  |  |               |           | ■          | ■                           | ■              | ■              |                  | ■*             | ■                  | ■        |                           | ■                 | 3                      | 54, 60                         | 25/50  |
| Gray                     |                    |                    |  | ■  |  |               |           | ■          | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54, 60                     | 50/100/150/200                                     |
| Clear                    | ■                  |                    |  |  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 36, 53.5                       | 10/25/50   |
| Gray                     | ■                  |                    |  |  |  |               | ■         |            | ■                           |                |                |                  |                | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30                             | 50/100/150/200                                     |
|                          |                    |                    |  |  |  |               |           |            |                             |                |                |                  |                |                    |          |                           |                   | 54                     | 25/50/100/200                  |  |
| Clear                    | ■                  |                    |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54, 60                     | 50/100/150/200                                     |
| Clear                    | ■                  |                    |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        |                           | ■                 | 3, 6                   | 54                             | 50/100/150/200                                     |
| Clear                    | ■                  |                    |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        |                           | ■                 | 3, 6                   | 54                             | 50/100/150/200                                     |
| Gray                     | ■                  |                    |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 48, 54, 60                 | 25/50/100/150/200                                  |
| Clear                    | ■                  |                    |  |  |  | ■             |           |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54, 60                     | 50   |
| Gray                     |                    |                    |  | ■  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 48, 54, 60                 | 50/100/150/200                                     |
| Gray                     |                    | ■                  |  |  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 48, 54, 60                 | 50/100/150/200                                     |
| Gray                     |                    |                    |  | ■  |  |               | ■         |            | ■                           | ■              |                |                  | ■*             |                    | ■        | ■                         | ■                 | 3, 6                   | 48, 54                         | 50/100   |
| Gray                     | ■                  |                    |  |  |  |               |           | ■          | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 30, 54, 60                     | 50/100/150/200                                     |
| Gray                     |                    | ■                  |  |  |  |               | ■         |            | ■                           | ■              | ■              |                  | ■              | ■                  | ■        | ■                         | ■                 | 3, 6                   | 48, 54, 60                     | 25/50/100/150/200                                  |
| —                        |                    |                    |  |  |  |               |           |            | ■                           | ■              | ■              |                  |                |                    | ■        |                           |                   | 3                      | 59, 79, 98, 102, 126, 150, 165 | 164 ft.  |
| —                        |                    |                    |  |  |  |               |           |            | ■                           | ■              | ■              |                  |                |                    | ■        |                           |                   | 3                      | 79, 98, 102, 126, 150, 165     | 164 ft.  |

\* Not for prespaced graphics






High Performance Products — Film Characteristics

Reflective Media

Reflective Media

| Number  | Product   | Durability and Warranties                     |                   |                       | Application Surfaces |                  |            |               |                 |                                    |                     |                            | Film Characteristics |                  |                       |                                    |                  |             |
|---------|---|---|-------------------|-----------------------|----------------------|------------------|------------|---------------|-----------------|------------------------------------|---------------------|----------------------------|----------------------|------------------|-----------------------|------------------------------------|------------------|-------------|
|         |   |   |                   |                       |                      |                  |            |               |                 |                                    |                     |                            | Film Construction    |                  |                       | Visual Properties                  |                  |             |
|         |   | Expected Performance Life, Unprinted (Years)† | 3M™ MCS™ Warranty | Performance Guarantee | Flat                 | Flat with Rivets | Corrugated | Simple Curves | Compound Curves | Deep Channels and Concave Surfaces | Flexible Substrates | Textured Wall and Surfaces | Film Material        | Cast or Non-Cast | Film Thickness (mils) | Face Finish (Gloss, Luster, Matte) | Retro-Reflective | Transparent |
| IJ680CR | 3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive IJ680CR | 9   | ■                 | ■                     | ■                    | ■                | ■          | ■             |                 |                                    |                     |                            | Vinyl                | N/A              | 7                     | L                                  | ■                |             |
| IJ680   | 3M™ Scotchlite™ Reflective Graphic Film IJ680                                   | 9   | ■                 | ■                     | ■                    | ■                | ■          | ■             |                 |                                    |                     |                            | Vinyl                | N/A              | 7                     | L                                  | ■                |             |
| IJ5100R | 3M™ Scotchlite™ Reflective Graphic Film IJ5100R                                 | 7   | ■                 | ■                     | ■                    | ■                | ■          | ■             |                 |                                    |                     |                            | Vinyl                | N/A              | 7                     | L                                  | ■                |             |
| IJ5100  | 3M™ Scotchlite™ Reflective Graphic Film IJ5100                                  | 7   | ■                 | ■                     | ■                    | ■                | ■          | ■             |                 |                                    |                     |                            | Vinyl                | N/A              | 7                     | L                                  | ■                |             |
| IJ5000  | 3M™ Scotchlite™ Reflective Graphic Film IJ5000                                  | 1.5   | ■                 |                       | ■                    | ■                |            | ■             |                 |                                    |                     |                            | Vinyl                | N/A              | 6                     | L                                  | ■                |             |

Overlaminates for Protection of Inkjet Printed Media

|   |   |       |  |    |   |   |   |   |   |   |   |   |                          |                          |     |   |  |   |
|---|---|-------|--|----|---|---|---|---|---|---|---|---|--------------------------|--------------------------|-----|---|--|---|
|  |  | 8549L | 3M™ Envision™ Luster Wrap Overlaminate 8549L     | 9  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | High Performance non-PVC | High Performance non-PVC | 2   | L |  | ■ |
|  |   | 8548G | 3M™ Envision™ Gloss Wrap Overlaminate 8548G      | 9  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | High Performance non-PVC | High Performance non-PVC | 2   | G |  | ■ |
|   |   | 8528  | 3M™ Scotchcal™ Gloss Overlaminate 8528           | 9  | ■ | ■ | ■ | ■ | ■ |   |   |   | Vinyl                    | Cast                     | 1   | G |  | ■ |
|   |   | 8518  | 3M™ Scotchcal™ Gloss Overlaminate 8518           | 8  | ■ | ■ | ■ | ■ | ■ |   |   |   | Vinyl                    | Cast                     | 2   | G |  | ■ |
|   |   | 8519  | 3M™ Scotchcal™ Luster Overlaminate 8519          | 8  | ■ | ■ | ■ | ■ | ■ |   | ■ |   | Vinyl                    | Cast                     | 2   | L |  | ■ |
|   |   | 8520  | 3M™ Scotchcal™ Matte Overlaminate 8520           | 8  | ■ | ■ | ■ | ■ | ■ |   | ■ |   | Vinyl                    | Cast                     | 2   | M |  | ■ |
|   |   | 8524  | 3M™ Scotchcal™ Luster Overlaminate 8524          | 7* | ■ |   |   | ■ |   |   |   | ■ | Plastic                  | N/A                      | 2   | L |  | ■ |
|   |   | 8914  | 3M™ Scotchcal™ Optically Clear Overlaminate 8914 | 8  | ■ |   |   | ■ |   |   |   |   | Vinyl                    | Cast                     | 2   | G |  | ■ |
|   |   | 8915  | 3M™ Scotchcal™ Ultra-Matte Overlaminate 8915     | 8  | ■ | ■ | ■ | ■ | ■ |   |   |   | Vinyl                    | Cast                     | 2   | M |  | ■ |
|  |   | 8908  | 3M™ Scotchcal™ Luster Overlaminate 8908          | 1  | ■ | ■ |   | ■ |   |   |   |   | Polyolefin               | Non-Cast                 | 2.5 | L |  | ■ |
|  |   | 8909  | 3M™ Scotchcal™ Matte Overlaminate 8909           | 1  | ■ | ■ |   | ■ |   |   |   |   | Polyolefin               | Non-Cast                 | 2.5 | M |  | ■ |
|   |   | 3645  | 3M™ Scotchcal™ Luster Overlaminate 3645          | 1  | ■ |   |   |   |   |   |   |   | Vinyl                    | Cast                     | 8   | L |  | ■ |
|   |   | 3619  | 3M™ Scotchcal™ Luster Overlaminate 3619          | 6  | ■ |   |   |   |   |   | ■ |   | Vinyl                    | Cast                     | 2   | L |  | ■ |
|   |   | 3620  | 3M™ Scotchcal™ Matte Overlaminate 3620           | 6  | ■ |   |   |   |   |   | ■ |   | Vinyl                    | Cast                     | 2   | M |  | ■ |
|   |   | 3658G | 3M™ Scotchcal™ Gloss Overlaminate 3658G          | 9  | ■ |   |   | ■ |   |   | ■ |   | Vinyl                    | Cast                     | 2   | G |  | ■ |
|   |   | 3660M | 3M™ Scotchcal™ Matte Overlaminate 3660M          | 9  | ■ |   |   | ■ |   |   | ■ |   | Vinyl                    | Cast                     | 2   | M |  | ■ |

\* When used on a textured surface, expected life guidelines remain greater than two years indoors and up to six months outdoors. Graphics can perform much longer in drier, temperate climates.  
† Maximum expected outdoor durability of unprinted films. For actual warranties of specific film, ink and overlaminate combinations, refer to the warranty matrices or the appropriate base film 3M Product Bulletin.



3M products are designed with our printing partners in mind.

| ADHESIVE CHARACTERISTICS |                    |                    |  |               |           | INK COMPATIBILITY           |             |                |                  | CUTTING METHOD |          |         |          | LINER       |                                   |                   | CORE                   | AVAILABILITY            |  |
|--------------------------|--------------------|--------------------|--|---------------|-----------|-----------------------------|-------------|----------------|------------------|----------------|----------|---------|----------|-------------|-----------------------------------|-------------------|------------------------|-------------------------|--|
| COLOR                    | FEATURES           |                    |  | REMOV-ABILITY |           |                             |             |                |                  |                |          |         |          |             |                                   |                   |                        |                         |  |
| Adhesive Color           | Pressure-Sensitive | Pressure-Activated | Pressure-Activated with Air Release Channels | Permanent     | Removable | Inkjet – Solvent/ecoSolvent | Inkjet – UV | Inkjet – Latex | Inkjet – Aqueous | Electronic Cut | Kiss Cut | Die Cut | Hand Cut | Kraft Paper | Polyethylene-coated Paper Layflat | Polyester Layflat | Core Sizes (in inches) | Roll Widths (in inches) | Roll Lengths (in yards unless otherwise specified) |
| Clear                    |                    |                    | ■  |               | ■         | ■                           | ■           | ■              |                  | ■              | ■        | ■       | ■        |             | ■                                 |                   | 3, 6                   | 36, 48                  | 50/100<br>Non-standard lengths available           |
| Clear                    |                    | ■                  |  | ■             |           | ■                           | ■           | ■              |                  | ■              | ■        | ■       | ■        |             | ■                                 |                   | 3, 6                   | 36, 48                  | 50/100<br>Non-standard lengths available           |
| Clear                    | ■                  |                    |  |               | ■         | ■                           | ■           | ■              |                  | ■              | ■        | ■       | ■        |             | ■                                 |                   | 3                      | 48                      | 10/50<br>Non-standard lengths available            |
| Clear                    | ■                  |                    |  | ■             |           | ■                           | ■           | ■              |                  | ■              | ■        | ■       | ■        |             | ■                                 |                   | 3                      | 48                      | 10/50<br>Non-standard lengths available            |
| Clear                    | ■                  |                    |  | ■             |           | ■                           | ■           |                |                  | ■              | ■        | ■       | ■        |             |                                   | ■                 | 3                      | 48                      | 50<br>Non-standard lengths available               |

|                 |   |  |  |   |  |   |   |   |   |   |   |   |   |   |  |   |   |                  |  |
|-----------------|---|--|--|---|--|---|---|---|---|---|---|---|---|---|--|---|---|------------------|--|
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ |   |  | ■ | 3 | 54               | 25/50/100                                    |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ |   |  | ■ | 3 | 54               | 25/50/100                                    |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ |   |  | ■ | 3 | 48, 54           | 25/50/100                                    |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 54               | 25/50  |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 36, 48.5, 54, 60 | 25 /50/100<br>Non-standard lengths available |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 36, 48.5, 54, 60 | 25/50/100<br>Non-standard lengths available  |
| Clear           | ■ |  |  | ■ |  | ■ |   | ■ |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 30               | 50   |
|                 |   |  |  |   |  |   |   |   |   |   |   |   |   |   |  |   |   | 54               | 25/50  |
| Optically Clear | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ |   |  | ■ | 3 | 48, 54           | 10/50<br>Non-standard lengths available      |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 49, 54, 60       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  | ■ |  | ■ | ■ |   |   |   |   | ■ | ■ | ■ |  |   | 3 | 54               | 50/100<br>Non-standard lengths available     |
| Clear           | ■ |  |  | ■ |  | ■ | ■ |   |   |   |   | ■ | ■ | ■ |  |   | 3 | 49, 54           | 50/100<br>Non-standard lengths available     |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 36, 48, 54       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 48, 54, 60       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  | ■ |  | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 48, 54, 60       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  |   |  | ■ | ■ |   |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 48, 54, 60       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  |   |  | ■ | ■ |   |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 48, 54, 60       | 50<br>Non-standard lengths available         |
| Clear           | ■ |  |  |   |  | ■ | ■ |   |   | ■ | ■ | ■ | ■ | ■ |  |   | 3 | 48, 54, 60       | 50<br>Non-standard lengths available         |

For complete product details and warranted applications, go to [3mgraphics.com/TechInfo](https://www.3mgraphics.com/TechInfo)

# Solid Color Films — No Printing or Overlaminates Needed

## ElectroCut Film

| Number | Product   | APPLICATIONS                               |                                |                          |                                |                          |                          |                          |                          |  |
|--------|---|--|--------------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
|        |   | Fleet (commercial trailer, truck, tractor) | Transit (bus, passenger train) | Railroad                 | Label (warning, informational) | Signage - Non-backlit    | Cut Letters/Shapes       | Window Graphics          | OEM Graphics             |  |
| 7725   | 3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7725 | <input type="checkbox"/>                   | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2 mil dimensionally stable films with permanent adhesive, designed for electronically-controlled friction-fed or flat-bed cutters. Synthetic layflat liner eliminates curl in humid conditions and liner splitting when wet. Cuts and weeds down to 1/4". Up to 8 year expected performance life. Backed by the 3M™ MCS™ Warranty. |
| 7125   | 3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7125 | <input type="checkbox"/>                   | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2 mil dimensionally stable films with permanent adhesive, designed for electronically-controlled friction-fed or flat-bed cutters. Paper release liner helps improve speed and quality of cutting and weeding. Cuts and weeds down to 3/8". Up to 8 year expected performance life. Backed by the 3M™ MCS™ Warranty.               |
| 50     | 3M™ Scotchcal™ Graphic Film Series 50               | <input type="checkbox"/>                   | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4 mil durable films that offer reliable, affordable 3M solutions. Removable adhesive allows de-identification for up to 3 years with no adhesive residue. Allows reuse of substrates. Excellent cutting and weeding down to 3/8" with an expected performance life of 5 years.   |



### ADVANTAGES & COMMON USES

## High Performance Fleet Film

|      |   |                          |                          |                          |                          |                          |                          |                          |                          |   |
|------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| 180C | 3M™ Controllac™ Graphic Film with Comply™ Adhesive 180C | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2 mil cast film. Repositionable, pressure-activated, pigmented adhesive with air release. Great for fleet graphics, emblems, striping and bus graphics. Up to 10 year expected performance life. Backed by the 3M™ MCS™ Warranty. |
|------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|



**Remember**  
3M Application Tapes help you get the job done and they are an important component for the 3M™ MCS™ Warranty.

## Wrap Film

| 3M™ Wrap Film  | Texture/Finish | Film Properties        | Roll Width | Warranty          | Advantages & Common Uses  |
|----------------|----------------|------------------------|------------|-------------------|---|
| Series 1080-BR | Brushed metal  | 3.5 to 5 mil Dual Cast | 60"        | 3M™ MCS™ Warranty | Ready to use right out of the box—no printing or overlaminate required. Features slideable and repositionable pressure-activated adhesive with non-visible air release channels. Removable. |
| Series 1080-CF | Carbon fiber   |                        |            |                   |   |
| Series 1080-SF | Straight fiber |                        |            |                   |   |
| Series 1080-G  | Gloss          |                        |            |                   |   |
| Series 1080-M  | Matte          |                        |            |                   |   |
| Series 1080-S  | Satin          |                        |            |                   |   |



Order samples and see the full line of colors and finishes at [3Mgraphics.com/1080](http://3Mgraphics.com/1080).

For complete product details and warranted applications, go to [3mgraphics.com/TechInfo](http://3mgraphics.com/TechInfo)



## Intermediate Products

# Everyday Films, Value Priced

The 3M line-up of intermediate films is all about providing great image quality and consistency at the right price.

## Customer Favorites:

### Film 40C Versatility for multiple applications

3M™ Controltac™ Print Film 40C features great printability, ease of installation with Controltac™ repositionability, air release channels, and good removability. Use for floor graphics, general signage and POP signs, partial vehicle graphics, and smooth walls. This multi-purpose film helps you:

- Reduce film inventory
- Get greater print consistency
- Reduce film waste in material reloading
- Save set up and maximize machine time
- Quick, time-saving application with slideability, air release and snap-up



### Film IJ35C Value in every sq. ft.

Your customer wants fast turnaround, a low price and a great image. You want a film that you can trust to provide the print quality that reflects your business values. When removability isn't a concern, 3M™ Scotchcal™ Graphic Film IJ35C, with air release channels for virtually bubble-free applications, is the solution.



**30 Series**  
General Sign & Flat Transit

**40 Series**  
Simple Curve & Transit Wrap

**60 Series**  
Window & Backlit

**Other**  
Film Options

**Overlaminates**


# Intermediate Products — Everyday Films, Value Priced

The films to grab for general sign, window, floor, bus wrap or partial vehicle wrap applications.

## Description



## Applications

|  | Number  | Product   | Features & Benefits  | Fleet and Vehicle | Floor | Label | Signage — Backlit | Signage — Non-Backlit | Smooth Walls | Transit | Vehicle Wraps | Window or Glass | Application Feature                    | Expected Performance Life*                     |
|--|---|---|--|-------------------|-------|-------|-------------------|-----------------------|--------------|---------|---------------|-----------------|--|--|
| 30 Series<br>General Sign & Flat Transit | IJ35-10, IJ35-20  | 3M™ Scotchcal™ Graphic Film IJ35-10 and IJ35-20                         | Excellent imageability, permanent adhesive, attractive price. Available in gloss and matte finish.   |                   |       | ■     |                   | ■                     | ■            |         |               |                 | Flat & Simple Curves                   | 5 yr   |
|  | IJ35C-10, IJ35C-20  | 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ35C-10 and IJ35C-20 | Excellent imageability, air release technology, permanent adhesive, attractive price. Available in gloss and matte finish.   |                   |       | ■     |                   | ■                     | ■            |         |               |                 | Flat & Simple Curves                   | 5 yr   |
|  | IJ36-20   | 3M™ Transit Ad Graphic Film IJ36-20                                     | Excellent imageability, removes easily without heat, leaving little or no adhesive residue. Matte finish.  | ■                 |       |       |                   | ■                     |              | ■       |               |                 | Flat & Simple Curves                   | 1 yr   |
|  | IJ39-20   | 3M™ Scotchcal™ High Tack Graphic Film IJ39-20                           | Perfect for hard to stick surfaces including low-surface energy plastics like polyethylene and polypropylene used for motocross bikes and powder-coated paints. Matte finish.  | ■                 |       | ■     |                   | ■                     |              |         |               |                 | Flat & Simple Curves                   | 5 yr   |
| 40 Series<br>Simple Curve & Transit Wrap | 40C-10R, 40C-20R  | 3M™ Controltac™ Print Film 40C-10R and 40C-20R                          | Controltac™ technology for slideability with air release and easy removal with heat. Ideal for partial vehicle wraps, POP, flat vehicle and indoor short-term floor applications. Available in gloss and matte finish.     | ■                 | ■     | ■     |                   | ■                     | ■            |         | ■             | ■               | Flat & Simple Curves, Interior Floors  | 7 yr (Flat & Simple Curves)<br>3-12 mo (Floor) |
|  | IJ46-20   | 3M™ Transit Wrap Graphic Film IJ46-20                                   | Excellent imageability, removes easily without heat, leaving little or no residue. Optimized for bus wraps. Matte finish.  | ■                 |       |       |                   | ■                     | ■            | ■       |               |                 | Flat & Simple Curves                   | 1 yr   |
| 60 Series<br>Window & Backlit            | IJ61  | 3M™ Changeable Window Graphic Film IJ61                                 | Clear product designed for short-term window applications. Low-tack adhesive makes for easy removal of this budget-conscious film.   |                   |       |       |                   | ■                     |              |         |               | ■               | Flat & Simple Curves                   | 1 yr   |
|  | IJ63-20   | 3M™ Scotchcal™ Changeable Translucent Graphic Film IJ63                 | Excellent imageability. Removes easily without heat, leaving little or no adhesive residue. Ideal for short-term backlit and window applications. Matte finish.  |                   |       |       | ■                 | ■                     |              |         |               | ■               | Flat & Simple Curves                   | 1 yr   |
|  | IJ67  | 3M™ Scotchcal™ Perforated Window Film IJ67                              | This 60/40 perforation pattern offers excellent imageability in building, retail and bus applications. Removable for up to 6 months. Replaces 3M films IJ65 and IJ66.  | ■                 |       |       |                   |                       |              | ■       |               | ■               | Flat & Simple Curves                   | 1 yr   |
| Other<br>Film Options                    | IJ162   | 3M™ Controltac™ Graphic Film IJ162                                      | Excellent imageability, slideable and repositionable, easy removal with heat. Great for indoor floor graphics.   |                   | ■     |       |                   |                       |              |         |               |                 | Interior Floor                         | 1 yr   |
|  | 3545C            | 3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C      | Environmentally friendly polyolefin film with no polyvinylchloride or monomeric plasticizers in its construction and made with less solvent in manufacturing when compared to traditional solvent-based adhesive products. | ■                 |       | ■     |                   | ■                     | ■            | ■       |               | ■               | Flat & Simple Curves, Flat with Rivets | 3 yr   |
| Overlaminates                            | 8508  | 3M™ Scotchcal™ Gloss Overlamine 8508                                    | Provides graphic protection when applied over most 3M Intermediate Products.   |                   |       | ■     | ■                 | ■                     | ■            | ■       |               | ■               | Flat & Simple Curves                   | 4 yr   |
|  | 8509  | 3M™ Scotchcal™ Luster Overlamine 8509                                   | Provides graphic protection for multiple short term applications including floors.   |                   | ■     | ■     | ■                 | ■                     | ■            | ■       |               | ■               | Flat & Simple Curves                   | 4 yr   |
|  | 8510M            | 3M™ Scotchcal™ Matte Overlamine 8510M                                   | Provides graphic protection when applied over most 3M Intermediate Products.   |                   |       | ■     | ■                 | ■                     | ■            | ■       |               | ■               | Flat & Simple Curves                   | 4 yr   |
|  | 8512G   | 3M™ Scotchcal™ Gloss Overlamine 8512G                                   | Provides abrasion resistance when applied over most 3M Intermediate Products and compliments Film IJ39 in low-surface energy applications.   |                   |       | ■     |                   | ■                     |              |         |               |                 | Flat & Simple Curves                   | 1 yr   |
|  | 8908, 8909       | 3M™ Scotchcal™ Luster Overlamine 8908 and Matte Overlamine 8909         | Environmentally preferred polyolefin film with no polyvinyl chloride or monomeric plasticizers in its construction.  |                   |       | ■     |                   | ■                     | ■            | ■       |               | ■               | Flat & Simple Curves                   | 1 yr   |

\* Maximum expected outdoor performance life of unprocessed media. Adding a more durable overlamine may not increase the expected performance life of the graphic construction.





| Face Film Characteristics |                       |                                    |              | Adhesive Characteristics |  | Ink Compatibility**                                  | Liner  | Optional Graphic Protection                       | Core Sizes (in inches) | Availability                                       |  |
|---------------------------|-----------------------|------------------------------------|--------------|--------------------------|--|--|--|---|------------------------|--|--|
| Film Material             | Film Thickness (mils) | Face Finish (Gloss, Matte, Luster) | Film Opacity | Adhesive Color           | Adhesive Features (permanent unless otherwise specified) |  |  |   |                        | Roll Widths (in inches unless otherwise specified) | Roll Lengths (in yards unless otherwise specified)                             |
| Non-Cast Vinyl            | 3.2                   | -10 = G<br>-20 = M                 | Opaque       | Gray with hiding power   | Pressure-Sensitive                                       | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3, 6                   | 30<br>54, 60.5<br>60.5                             | 50 (3" core)<br>50/100/200 (3" and 6" core)<br>2,300                           |
| Non-Cast Vinyl            | 3.2                   | -10 = G<br>-20 = M                 | Opaque       | Gray with hiding power   | Pressure-Sensitive with Air Release Channels             | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3,6                    | 30<br>54, 60.5                                     | 50/100/(3" core)<br>50/100/200 (3" and 6" core)                                |
| Non-Cast Vinyl            | 3.4                   | M                                  | Opaque       | Gray with hiding power   | Pressure-Sensitive, Changeable                           | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3, 6                   | 54<br>54<br>61.5<br>61.5                           | 50/100 (3" core)<br>100/200 (6" core)<br>50/100 (3" core)<br>100/200 (6" core) |
| Non-Cast Vinyl            | 3.5                   | M                                  | Opaque       | Clear                    | Pressure-Sensitive, High Tack                            | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8512, 8518, 8519, 8520         | 3                      | 54   | 50   |
| Non-Cast Vinyl            | 3                     | -10R = G<br>-20R = M               | Opaque       | Gray with hiding power   | Pressure-Activated with Air Release Channels, Removable  | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3, 6                   | 30<br>54, 60<br>54, 60                             | 50/100/(3" core)<br>50/100/(3" core)<br>100/200 (6" core)                      |
| Non-Cast Vinyl            | 4                     | M                                  | Opaque       | Gray with hiding power   | Pressure-Sensitive, Changeable                           | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3, 6                   | 54, 60<br>54, 60                                   | 50/100/(3" core)<br>100/200 (6" core)  |
| Non-Cast Vinyl            | 3                     | G                                  | Transparent  | Clear                    | Pressure-Sensitive, Changeable                           | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3                      | 54   | 50   |
| Non-Cast Vinyl            | 3.2                   | M                                  | Translucent  | Clear                    | Pressure-Sensitive, Changeable                           | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 8508, 8509, 8510M, 8518, 8519, 8520               | 3, 6                   | 54   | 50/100 (3" core)<br>100/200 (6" core)  |
| Non-Cast Vinyl            | 5.9                   | M                                  | Opaque       | Clear                    | Pressure-Sensitive, Removable                            | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Polycoated paper with continuous paper backing layer | 8518, 8914  | 3                      | 54<br>27, 54                                       | 50<br>10/25/50   |
| Non-Cast Vinyl            | 4                     | M                                  | Opaque       | Gray                     | Pressure-Activated, Removable                            | Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex | Layflat Polycoated Paper                             | 3645, 8509  | 3, 6                   | 48<br>54, 60                                       | 50 (3" core)<br>50 (3" core)<br>100/200 (6" core)                              |
| Non-Cast Polyolefin       | 4                     | M                                  | Opaque       | Gray                     | Pressure-Activated with Air Release Channels, Removable  | Screen Print, Inkjet – Solvent/ecoSolvent, UV        | Layflat Polycoated Paper                             | 1920DR, 8518, 8519, 8520, 8908, 8909, 8510M, 8915 | 3, 6                   | 48<br>54   | 50 (3" core)<br>50/100 (3" core)<br>100 (6" core)                              |
| Cast Vinyl                | 2.3                   | G                                  | Transparent  | Clear                    | Pressure-Sensitive Permanent                             | Inkjet – Solvent/ecoSolvent, UV, Latex               | Kraft Paper  | N/A   | 3                      | 30, 54, 61   | 50/100   |
| Non-Cast Vinyl            | 3                     | L                                  | Transparent  | Clear                    | Pressure-Sensitive Permanent                             | Inkjet – Solvent/ecoSolvent, UV, Latex               | Kraft Paper  | N/A   | 3                      | 30, 54, 61   | 50/100   |
| Non-Cast Vinyl            | 3.5                   | M                                  | Transparent  | Clear                    | Pressure-Sensitive Permanent                             | Inkjet – Solvent/ecoSolvent, UV, Latex               | Kraft Paper  | N/A   | 3                      | 30, 54, 61   | 50/100   |
| Non-Cast Vinyl            | 12                    | G                                  | Transparent  | Clear                    | Pressure-Sensitive Permanent                             | Inkjet – Solvent/ecoSolvent, UV, Latex               | Kraft Paper  | N/A   | 3                      | 54   | 25/50  |
| Non-Cast Polyolefin       | 2.5                   | 8908 = L<br>8909 = M               | Transparent  | Clear                    | Pressure-Sensitive                                       | Inkjet – Solvent/ecoSolvent, UV                      | Kraft Paper  | N/A   | 3                      | 54   | 50/100   |

\*\* ecoSolvent applies to inkjet printing only. Whether screen print or inkjet, be sure to test 3M Intermediate Products on your own equipment and inks prior to using as conditions vary by location.  
† Offerings available through FDC.

|        |  | APPLICATION METHOD |              | CLEAR COAT CHARACTERISTICS |         |            |             | AVAILABILITY (GALLONS) | EXPECTED PERFORMANCE LIFE† | COMMON APPLICATIONS* |            |                |                 |                       |                  |
|--------|--|--------------------|--------------|----------------------------|---------|------------|-------------|------------------------|----------------------------|----------------------|------------|----------------|-----------------|-----------------------|------------------|
| Number | Product                                | Liquid Laminator   | Screen Press | Aqueous                    | Solvent | UV-Curable | Gloss Level |                        |                            | Inkjet– Solvent      | Inkjet– UV | Inkjet - Latex | Inkjet– Aqueous | Screen Print– Solvent | Screen Print– UV |
| 1920DR | 3M™ Screen Print Gloss Clear 1920DR    |                    | ■            |                            | ■       |            | Gloss       | 1                      | 5                          | ■                    |            | ■              | ■               | ■                     |                  |
| 8530   | 3M™ Piezo Inkjet Protective Clear 8530 | ■                  |              | ■                          |         |            | Luster      | 5                      | 3                          | ■                    |            |                |                 |                       |                  |
| 9740i  | 3M™ Screen Print UV Gloss Clear 9740i  |                    | ■            |                            |         | ■          | Gloss       | 1 and 5                | 8                          | ■                    | ■          |                |                 | ■                     | ■                |

\*Varies based on specific base film and ink combinations. Refer to 3M Product Bulletins for product-specific information.  
† Expected Performance Life is not a warranted period of time. The Warranty Periods for recommended graphic constructions are provided in the warranty matrices or the applicable base film 3M Product Bulletin.

|        |                                    |  |   | COMMON APPLICATION SURFACES |                  |            |                          |                 |                     |
|--------|------------------------------------|--|---|-----------------------------|------------------|------------|--------------------------|-----------------|---------------------|
| Number | Product                            | PRINTER PLATFORM   | DESCRIPTION   | Flat                        | Flat with Rivets | Corrugated | Simple & Moderate Curves | Compound Curves | Flexible Substrates |
| 1500v2 | 3M™ Piezo Inkjet Ink Series 1500v2 | EFI™ VUTEK® 150, 2360/3360, 3300/5300, 3000/5000 Printers                            | Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan, Light Magenta, Light Yellow and Light Black. | ■                           | ■                | ■          | ■                        | ■               | ■                   |
| 4400   | 3M™ Piezo Inkjet Ink Series 4400   | HP Scitex XL Jet 1200 and 1500 Printers  | Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan, Light Magenta, Light Yellow and Light Black. | ■                           | ■                | ■          | ■                        | ■               | ■                   |
| 4800   | 3M™ Piezo Inkjet Ink Series 4800   | HP Scitex TJ8300 Printer   | Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.                            | ■                           | ■                | ■          | ■                        | ■               |                     |
| GX     | SIIT GX 3M Ink * Series            | Seiko I Infotech ColorPainter™ H-74s, H-104s, W-54s, W-64s, H2-74s, H2-104s Printers | Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan, Light Magenta, Gray and Light Gray.          | ■                           | ■                | ■          | ■                        | ■               | ■                   |
| SX     | SIIT SX 3M Ink * Series            | Color Painter™ M-64  | Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan, Light Magenta, Gray and Light Gray.          | ■                           | ■                | ■          | ■                        | ■               | ■                   |

\*ONLY available through printer manufacturer. Contact Seiko Instruments USA at 1-800-264-1272.

| HP 881 | HP 881 Latex Ink, a 3M™ MCS™ Warranty Component*  | HP Latex 3000 Printer   | Latex-based, vibrant, flexible, six-color ink sets. Durable and weather resistant when used with compatible 3M overlaminates.                      | ■ | ■ | ■ | ■ | ■ | ■ |
|--------|---|---|--|---|---|---|---|---|---|
| HP 831 | HP 831 Latex Inks, a 3M™ MCS™ Warranty component* | HP Latex 360 Printer  | Latex-based, vibrant, flexible, six-color ink sets. Durable and weather resistant when used with compatible 3M overlaminates.                      | ■ | ■ | ■ | ■ | ■ | ■ |
| LX610  | HP Latex Inks, a 3M™ MCS™ Warranty component*     | HP Designjet L65500, Scitex LX600, LX800, Latex 820 and 850, LX820 and LX850 Printers | Latex-based, pigmented, weather-resistant with overlaminate. Excellent color vibrancy. Available in CMYK colors plus Light Cyan and Light Magenta. | ■ | ■ | ■ | ■ | ■ | ■ |
| 792    | HP Latex Inks, a 3M™ MCS™ Warranty component*     | HP Designjet L26500, L26100 and L28500, Latex 210, 260 and 280 Printers               | Latex-based, pigmented, weather-resistant with overlaminate. Excellent color vibrancy. Available in CMYK colors plus Light Cyan and Light Magenta. | ■ | ■ | ■ | ■ | ■ | ■ |

\*ONLY available by contacting HP at 1-866-229-7313.

| GSLXr   | EFI™ VUTEk® GSLXr 3M™ SuperFlex UV Ink | EFI™ VUTEk® GS3250LXr Printer, GS5500LXr Pro Printer | UV LED-cured, weather-resistant, excellent color retention, super flexible and conformable. Available in standard CMYK plus Light Cyan, and Light Magenta for both printers., Light Black, Light Yellow also available for GS5500LXr Pro Printer. | ■ | ■ | ■ | ■ | ■ | ■ |
|---------|--|--|---|---|---|---|---|---|---|
| GSLX    | EFI™ VUTEk® GSLX 3M™ SuperFlex UV Ink  | EFI™ VUTEk® GS2000LX Printer, GS3250LX Printer       | UV LED-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta, Light Yellow and Light Black.   | ■ | ■ | ■ | ■ | ■ | ■ |
| GSr     | EFI™ VUTEk® GSr 3M™ Premium UV Ink*    | EFI™ VUTEk® GS5000r and GS3250r Printers             | UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta, Light Yellow, Light Black and White.  | ■ | ■ | ■ | ■ |   | ■ |
| GS      | EFI™ VUTEk® GS 3M™ Premium UV Ink*     | EFI™ VUTEk® GS2000, GS3200 and GS3250 Printers       | UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta, Light Yellow and Light Black.   | ■ | ■ | ■ | ■ |   | ■ |
| R3225   | EFI™ R3225 3M™ UV ink*                 | EFI™ R3225 Printer                                   | UV LED-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK.   | ■ | ■ | ■ | ■ |   | ■ |
| 2200UV  | 3M™ Piezo Inkjet Ink Series 2200UV*    | EFI™ VUTEk® PV200 Printer                            | UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta and White.   | ■ | ■ | ■ | ■ |   | ■ |
| 2800UV  | 3M™ Piezo Inkjet Ink Series 2800UV*    | EFI™ VUTEk® QS Printers                              | UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta and White.   | ■ | ■ | ■ | ■ |   | ■ |
| 2700UV  | 3M™ Piezo Inkjet Ink Series 2700UV     | Durst Rho 160R and 351R Printers                     | UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus White.   | ■ | ■ | ■ | ■ |   | ■ |
| LUS-200 | Mimaki UV Ink LUS-200                  | Mimaki UJV500-160 Printers                           | UV LED-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK. A 3M™ MCS™ Warranty component (Manufactured by 3M)  | ■ | ■ | ■ | ■ | ■ | ■ |
| LF200   | Mimaki LF200 UV Ink*                   | Mimaki UJV-160, JFX-1631 and JFX-1615R Printers      | UV LED-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK. Manufactured by 3M.   | ■ | ■ | ■ | ■ | ■ | ■ |

\*ONLY available through printer manufacturer. Contact EFI VUTEk at 1-877-EFI-INKS and Mimaki USA at 1-888-530-4021.



# Graphic Application Tools

At 3M, we are continuously looking for ways to improve the large-format graphics industry. You can count on 3M to develop tools and materials to help you achieve the best possible results for your customers. These graphic installation tools are designed for comfort and assist the installer in applying large-format graphics easier and faster.

## 3M™ Hand Applicator PA-1

Inexpensive, reusable squeegee-type applicator is flexible yet durable. This tool is the perfect solution for applying film or premask.



## 3M™ Low Friction Sleeve SA-1

Reusable paper sleeve slips over the PA-1 applicators to protect the substrate from being marked or scratched.



## 3M™ Power Grip Applicator for 3M™ Comply™ Adhesive Films CPA-1

Designed only for films with the Comply™ Adhesive feature. The applicator makes it easy to cover large areas with a uniform distribution of pressure. The felt-wrapped edge disperses air evenly for a virtually bubble-free application, and the rounded grip is more comfortable for the installer.

## 3M™ Power Grip Rivet Brush Applicator RBA-3

Burnish all films over rivets with ease. The larger handle grip is more comfortable and encourages full arm movement. Burnish film over rivets faster with the stiffer bristles.



## 3M™ Air Release Tool 391x

Puncture film that has already been applied to a substrate to remove entrapped air bubbles.

## 3M™ Rivet Brush Applicator RBA-1

Graphics are easier to install over rivets using this traditional applicator tool.

## 3M™ Tape Primer 94

Used to promote adhesion of 3M films to surfaces such as many plastics and paints. Recommended for use especially when conforming film to deep channels.



## 3M™ Power Grip Multi-Pin Air Release Tool MPP-1

Features a uniquely designed grip. With multiple pins, only a single motion is needed per rivet, saving time during installation on all films.



## 3M™ Power Grip Magic Pad Rivet Applicator CMP-1

Designed exclusively for 3M™ Controltac™ Graphic Films with Comply™ Adhesive. The 3M magic pad rivet applicator, with its large foam pad, makes it easy to conform heated film around rivets. The larger handle grip is designed for comfort.



## 3M™ Edge Sealing Tape 8914

Used to improve the resistance to environmental damage and enhance the durability of the graphics. Protects film edges and seams.



## 3M™ Vehicle Channel Applicator Tool VCAT-2

Custom designed durable soft foam roller for vehicle channels.



## 3M™ Roller L (large)

Custom designed durable firm roller for vehicle channels.



## 3M™ Rapid Roller Applicator CPA-2

Designed exclusively for 3M™ Controltac™ Graphic Films with Comply™ Adhesive. The 3M rapid roller applicator makes it easy to apply film. This tool has a rounded rubber grip that is more comfortable and encourages full arm movement.



## 3M™ Roller S (small)

Custom designed durable firm roller used as finishing tool in vehicle channels.



## Textured Surface Application Tools for Use with 3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624

### 3M™ Textured Surface Applicator TSA-1

Specialized tool used to conform large areas of film onto a textured surface.



### 3M™ Textured Surface Applicator TSA-2

Specialized tool used to conform heated film to mortar joints and inside corners.



### 3M™ Textured Surface Applicator TSA-3

Specialized tool used to conform heated film around cut edges and in corners and mosaic-type applications.



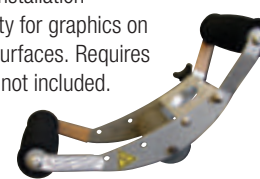
### 3M™ Installation Kit for Textured Surfaces

Combines all of the necessary tools in one kit for installing textured surface graphics using film IJ8624. Includes Stinel® Heat Gun, TSA-1, TSA-2 and TSA-3.



### 3M™ Two-Handled Textured Surface Applicator TSA-4 for Large Areas

Increase installation productivity for graphics on textured surfaces. Requires heat gun, not included.



## Head-to-Head with the Environment

3M's Weathering Resource Center is one of the world's largest accelerated testing facilities. Here, researchers relentlessly punish our products – films, inks, clear coats, overlaminates and finished graphics – with artificial rain, sun and extreme temperatures.

### Peace of Mind

3M goes beyond industry standards by using a battery of tests, including 20 accelerated weathering tests and a series of 3M-proprietary test methods, which are recognized internationally as improved predictors of real-world weathering results.

### Global Exposures

3M also conducts outdoor weathering tests at many sites around the world. This large network of sites lets 3M Commercial Graphics expose products to a range of environmental stresses – from the scorching desert heat of Arizona . . . to the tropical humidity of Thailand . . . to the bitter winter cold of Minnesota.



# Extreme Proven Performance The 3M



## Unparalleled Commitment to Durability Testing



Unlike other manufacturers, 3M tests both finished graphics and individual components

### Did you know?

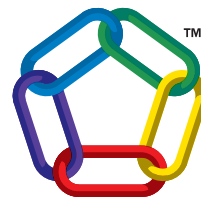
3M is recognized as a world leader in weathering test standards.

- 3M's outdoor test sites include locations that are accepted internationally as benchmarks for evaluating material durability.
- 3M's technologies offer the fastest, most accurate solar simulations in the weathering industry.
- 3M's activities in service-life predictions are unique in the industry.
- Our researchers hold primary authorship of several ASTM and SAE weathering standards.

All this means that you can count on 3M quality and durability even when nature stirs up its very worst. And your customers can count on brand consistency and product performance wherever they do business.

For Specific 3M Inkjet Products with Qualified OEM Inks

### 3M Performance Guarantee



3M™ MCS™ Warranty

For Finished Graphics Made Using All 3M Graphic Products and Components

### 3M™ MCS™ Warranty

To learn more about our warranties, go to [3Mgraphics.com/warranties](http://3Mgraphics.com/warranties).



# Conditions Difference



## Peace of Mind

**Backed by the strength of three rock solid warranties**

We offer you a choice in 3M Graphics Warranties to meet the needs and expectations of your customers, from the simple, solid reliability of our Basic Product Warranty, to the horizon-expanding 3M Performance Guarantee, and the comprehensive, standard-setting 3M™ MCS™ Warranty. That's how confident we are in the performance of our products.

### Knowing you can promise consistency from Miami to Madrid to Minsk

Because our products are manufactured to exacting specifications, your customers can take comfort in knowing they'll get the same look and the same quality anywhere they do business.

### Having the support you need, always

You can count on our global team of experts to guide you in product selection, design and installation. Training? Of course.



## Installer Programs

### Installation Training, Testing and Promotion

- Classes and testing available at regional 3M Authorized Facilities and with 3M Authorized Trainers throughout the U.S.
- Upon successful completion of testing, 3M will promote your services.
- Visit [3Mgraphics.com/installationprograms](http://3Mgraphics.com/installationprograms) or call 1-800-328-3908.
- Knifeless Accredited Installer Training & Testing at a 3M Graphics Authorized Training & Testing Facility. Contact: [rick@knifelesstechsystems.com](mailto:rick@knifelesstechsystems.com)



## Support

### Looking for Technical Information, Color Profiles or the Product Catalog?

Visit our website at [3mgraphics.com/colorprofile](http://3mgraphics.com/colorprofile) or contact your 3M Distributor.

### Need to speak to someone?

For General and Technical Information, call 1-800-328-3908. For sample rolls, or to order products in this guide, please visit [3Mgraphics.com/samples](http://3Mgraphics.com/samples) or contact your 3M Distributor.



# 3M Products are Designed with our Printing Partners in Mind



## Glossary of Terms

|   |  |   |   |
|---|--|---|---|
| 3M™ Comply™ Adhesive                    | 3M brand name for a characteristic that permits air bubbles to escape through channels in the adhesive as a film is being applied.   | IJ  | Inkjet printable film prefix that indicates the film is forward wound on an unnotched core.   |
| 3M™ Comply™ v3 Adhesive                 | 3M brand name for a characteristic that permits air bubbles to escape through almost invisible channels in the adhesive as a film is being applied.  | Perforated  | A grid of small holes found in some printable films that allows an image to be seen on one side of a clear substrate, but allows a viewer to see through the film from the other side.  |
| 3M™ Controltac™ Graphic Film            | 3M brand name for films with pressure-activated adhesive that is slideable and repositionable until firm pressure bonds it to the substrate.   | Permanent Adhesive  | Adhesive that is not intended to be removable.  |
| 3M™ Clear Coats                         | A liquid clear coat that can enhance or change the gloss of a graphic and provide resistance to dirt and harmful UV light.   | Positionable or Repositionable  | Light finger pressure may be used to tack the film in place to check for proper positioning and then repositioned if necessary. Firm pressure applied by any means, as well as high application temperature or removing and trying to reapply any liner, eliminates this feature. |
| 3M™ Envision™ Films                     | 3M brand name for products that deliver leading-edge technology, best-in-class performance with a sustainability edge.   | Pressure-Activated Adhesive   | Slideable, positionable and repositionable until firm pressure is applied with hand, squeegee or other application tool. Incompletely dried solvent in inkjet printed film may reduce the slideability. An applied film cannot be moved to another position.                      |
| 3M™ Scotchcal™ Graphic Film             | 3M brand name for films with pressure-sensitive adhesive that bonds upon contact.  | Pressure-Sensitive Adhesive   | Adheres upon contact to the substrate. Does not slide and cannot be repositioned.   |
| 3M™ Scotchcal™ Overlaminate             | 3M brand name for a transparent film that can enhance or change the gloss of a graphic as well as provide resistance to dirt, abrasion and harmful UV light.   | Removable Adhesive  | Can be removed with heat and/or chemicals with up to 30 percent adhesive residue.   |
| 3M™ Scotchlite™ Reflective Graphic Film | 3M brand name for a retroreflective film that allows a graphic to be clearly seen in low or no ambient light situations when a light source is directed at it from a point near the viewer's location. | Simple Curves   | A surface with a two-dimensional curve.   |
| Application Tape                        | Adhesive-backed translucent material used as an aid in applying graphics.  | Slideable<br>(For all 3M Controltac brand films and selected 3M Scotchlite brand films) | Film slides easily across the substrate while positioning for application. Incompletely dried solvent in inkjet printed film may reduce the slideability.   |
| Cast Film                               | Highest quality vinyl film for the best in image quality, conformability, dimensional stability and durability.  |   |   |
| Changeable Film                         | Can be removed without heat or chemicals and leaves little or no adhesive residue.   |   |   |
| Compound Curves                         | A surface with three-dimensional curves.   |   |   |
| Conformable                             | A feature in some graphic films that allows it to conform around curves and rivets.  |   |   |



The following is a summary of our warranties that may be available for the products you are using. Always refer to the current 3M Product Bulletin for the base film or substrate you are using to determine which warranty applies to your situation.

The 3M™ MCS™ Warranty protects the whole graphic and each individual graphic component. It covers manufacturing defects, premature failure, excessive dimensional change and loss of adhesion. 3M will replace all 3M materials used and, for certain products and applications, provide labor coverage for removal, remanufacture and reapplication. See the 3M Commercial Graphics Warranty brochure or our website for specific details.

The 3M Performance Guarantee covers product performance of 3M films and compatible 3M overlaminates and clear coats, which are guaranteed to be free of media-induced artifacts and to adhere to recommended substrates as specified in the corresponding 3M Product Bulletins. The 3M Performance Guarantee covers replacement cost of 3M materials only.

This catalog provides an Expected Performance Life period for each 3M film and overlaminate based on using the product without imaging or processing, and applied to flat surfaces in non-abusive environments. This period is a reliable expectation but

does not guarantee graphic performance. Always refer to 3M Product Bulletin for the base film or substrate you are using.

3M does not represent that any printer or printer accessory recommended in 3M literature, except for 3M branded printers and accessories, will meet customer requirements, any federal, state or local regulations or any applicable safety standards. Such determination is the responsibility of the printer owner.

Color profiles are provided on our website as a service to our customers. Profiles can conveniently be searched for via printer, RIP engine or media type.

Every effort has been made to ensure the accuracy and completeness of the information in this brochure. 3M, however, assumes no liability as a result of any errors or inaccuracies that may exist. For the most current information, please visit 3Mgraphics.com or call 1-800-328-3908.

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## Stay Informed:

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



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Release Q. August 2015  
Please recycle. Printed in USA.  
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75-5100-2487-2