3M Commercial Graphics
Inkjet Printing Materials for Solvent, UV, Latex and Aqueous Printing

October, 2011

NASCAR Officially Licensed

Creative Solutions
to Accelerate Your Success

Your Power over Wraps

3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive Technology

3M Intermediate Products Inside!
See page 10

3M

3M Commercial Graphics

For more than 50 years, 3M has been trusted by the world's largest companies to help build and protect their brands.
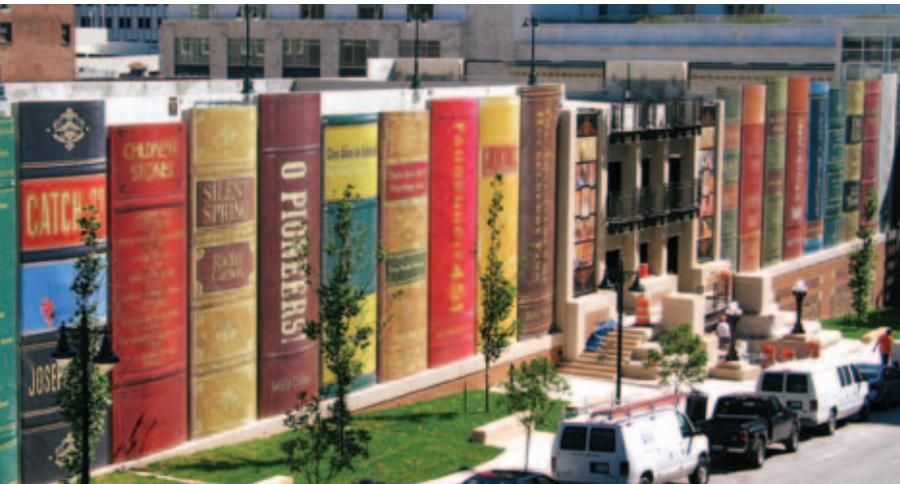
Our long history of innovation means one thing: you can count on us to help grow your business.

3M Digital Solutions

Practical
Products that help you succeed

3M leads the industry with innovative digital printing materials. We offer what you need to do your job well, including an exceptional range of graphic films, flexible substrates and overlaminates, clear coats, inks and application tools.

No one but 3M offers this range of products and backs it up with world-class testing.

Grand Prize Winner*

Little things make a **BIG** difference

*2008 Wrap to Win Contest

Courtesy of www.csn.org

Ingenious
Solutions that help you grow

When it comes to new products, 3M's research and development teams use our 40+ technology platforms to facilitate endless innovations for us and new opportunities for you.

Grow your bottom line with 3M.

Only one company
the confidence
everything under the su

A Broad Line of Products

Lets you handle even the most demanding customer needs

3M offers the latest technologies and the most comprehensive line of products to help you deliver what your customers envision.

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

See 3M™ Scotchcal™, Controltac™ and Scotchlite™ Graphic Films

Faster installation
- Increase productivity with fewer failures using 3M's patented adhesive system and 3M tools.
- Benefit from easy, bubble-free installation for challenging applications.

See 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive

Your **Power** over Wraps

Good looks that last longer
- Offer customers a variety of graphic protection options—from graffiti protection to slip resistance to brown spotting protection and high gloss.
- Benefit from high conformability, flexibility, durability and preferred finish.

See 3M™ Scotchcal™ Overlaminates and 3M Clear Coats

- Offer customers the longest outdoor durability and most flexible inkjet UV ink solutions.

See 3M UV-Curable Digital Inks

Greater visibility
- Greater nighttime visibility to help your customers increase impressions.

3M™ Scotchlite™ Reflective Graphic Films

Reliable
Performance you can count on

We subject our products to some of the industry's most rigorous tests to ensure that they work with all related system components to produce digital graphics of unsurpassed quality, consistency and durability.

3M's comprehensive warranties prove our level of confidence.

3M offers splice-free media
- For greater efficiencies and less waste
- Available for opaque, translucent, reflective and transparent films, and overlaminates
- Available in:
  – 50 yard (or less) rolls in all widths
  – 50 yard rolls on 3" cores in all widths for the following products: IJ680CR, IJ680, IJ5100R and IJ5100
  – 100 yard rolls on 6" cores in all widths
  – 100 yard rolls on 3" cores in all widths for the following products: IJ180Cv3, IJ180C, 8518, 8519, 8520 and 8915

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Applications at a Glance

Inkjet Media

IJ Media (IJ = forward wound, unnotched core)
RG Media (RG = reverse wound, notched core)
FN Media (FN = forward wound, notched core)

Number	IJ / RG / FN Media	Fleet 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	Floor	Advantages & Common Uses	Recommended Graphic Protection
IJ380Cv3	3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3		■	■										Taking wraps to the next level. Unrivaled conformability and lifting resistance with proprietary film technology. Bridge, stretch and adhere. No relief cuts. No lifting.	1920DR, 8580
IJ180C*	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C, FN180C and RG180C	■	■	■	■	■		■		■		■		Industry standard for vehicle graphics providing air release, repositionability, slideability and removability.	1920DR, 8518, 8519, 8520, 8528, 8530, 8908, 8909, 8915, 9720i, 9720UV
IJ180Cv3*	3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3, FN180Cv3 and RG180Cv3	■	■	■	■	■		■		■		■		Cv3 air release system for wraps! Releases air like film IJ180C along with a smoother and glossier appearance.	
IJ180	3M™ Controltac™ Graphic Film IJ180 and RG180	■	■	■	■	■		■	■	■				Used for large wall murals providing easy installation and reliable adhesion.	
IJ181	3M™ Controltac™ Graphic Film IJ181 and RG181	■						■						Designed for use on stainless steel applications.	
IJ170Cv3	3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3	■	■	■	■	■		■		■				Value priced solution with Cv3 air release system for vehicle graphics.	
IJ8150	3M™ Scotchcal™ Clear View Graphic Film IJ8150	■	■		■		■	■				■		Optical clarity in a printable, durable film.	3619, 3620, 8518, 8519, 8520, 8528, 8908, 8909, 8914, 8915, 1920DR, 9720UV, 9720i
IJ3552C	3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C, FN3552C and RG3552C	■	■		■			■		■		■		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, 9720i, 9720UV
IJ8171	3M™ Scotchcal™ Perforated Window Graphic Film IJ8171 and RG8171											■		Great conformability and durability on vehicle wrap windows. Only cast window film on the market.	8914
IJ8624	3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624 and RG8624										■			Designed for use on textured surfaces like brick, industrial stucco and cinder block.	8524
IJ3630-20	3M™ Scotchcal™ Translucent Graphic Film IJ3630-20, FN3630-20 and RG3630-20						■		■			■		Create vibrant backlit graphics with this durable translucent film.	1920DR, 3619, 3620, 8518, 8519, 8520, 8908, 8909, 8915, 9720i, 9720UV
IJ3650-10	3M™ Scotchcal™ Graphic Film IJ3650-10	■			■			■	■	■				Reliable permanent cast film for long-term signs and graphics.	
IJ3650-114	3M™ Scotchcal™ Graphic Film IJ3650-114, FN3650-114 and RG3650-114	■			■	■	■	■		■				Reverse image on this clear film for second surface graphics.	
IJ160C	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C and RG160C	■			■	■		■		■		■		Great for short-term vehicle graphics that demand slideability, repositionability and bubble-free installation.	1920DR, 8518, 8519, 8520, 8530, 8915, 9720i, 9720UV
IJ160	3M™ Controltac™ Graphic Film IJ160 and RG160	■			■	■		■		■		■		Great for flat application graphics that require slideability.	
3545C*	3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C and RG3545C	■			■	■		■		■		■		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
IJ3555	3M™ Scotchcal™ Changeable Graphic Film IJ3555 and RG3555	■			■			■		■		■		The ultimate in removability. Use this film for short-term promotional graphics.	1920DR, 8518, 8519, 8520, 8530, 8908, 8909, 9720i, 9720UV
IJ3470	3M™ Scotchcal™ Graphic Film IJ3470 and RG3470	■			■			■		■				Removable film for general sign applications.	1920DR, 8518, 8519, 8520, 8530, 8915, 9720i, 9720UV
IJ162-10	3M™ Controltac™ Graphic Film IJ162-10 and RG162-10												■	Create eye-catching floor graphics with this reliable and safe floor graphic product.	3645
IJ162-114	3M™ Controltac™ Graphic Film IJ162-114												■	This clear floor graphic film allows flexibility for the most unique designs.	
8522	3M™ Scotchcal™ Changeable Opaque Imaging Media 8522	■			■			■				■		Outstanding image quality and durability for aqueous inks.	8519, 8520
8566	3M™ Inkjet Floor Graphics Kit 8566												■	Excellent floor graphics solution for aqueous inks.	Includes 3645
Panagraphics III	3M™ Panagraphics™ III Wide Width Flexible Substrate				■									Wide width substrate for many types of signs.	3619, 3620, 8518, 8519, 8520

NEW (IJ8150)

* This product is also part of 3M's Environmental Solutions catalog. For more information, please visit 3M.com/sustainability.
** Film IJ8150 is only recommended for use on windows for this application.
NOTE: RG films are available only with a 3M Basic Warranty.

2011 Wide-Format Imaging Readers' Choice

2011 Digital Output Top 50 Winner

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

Reflective Media

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

Number	Product	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	Advantages & Common Uses	Recommended Graphic Protection
IJ680CR	3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive IJ680CR and RG680CR	■			■	■			■							Leading reflective film with slideability, air release and removability for easier, faster, bubble-free installations and removal.	
IJ680	3M™ Scotchlite™ Reflective Graphic Film IJ680 and RG680	■			■	■			■							Industry standard reflective film features slideability and increases graphic impressions by offering 24/7 visibility.	1920DR, 8518, 8519, 9720i, 9720UV
IJ5100R	3M™ Scotchlite™ Reflective Graphic Film IJ5100R and RG5100R	■			■	■			■							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.	

NOTE: RG films are available only with a 3M Basic Warranty.

Overlaminates for Protection of Inkjet Printed Media

NEW

Number	Product	Fleet	Vehicle Wraps	Watercraft	Transit	Label	Signage – Backlit	Signage – Backlit and Thermoformed	Signage – Non-Backlit	Awning	Banner	Smooth Walls	Textured Walls and Surfaces	Windows or Glass	Floor	Advantages & Common Uses
8528	3M™ Scotchcal™ Gloss Overlaminate 8528	■	■	■	■				■							The most durable overlaminate on the market. Lasting protection from UV light and acid rain.
8518	3M™ Scotchcal™ Gloss Overlaminate 8518	■	■	■	■	■	■	■	■			■	■	■		Offers high gloss in a highly conformable overlaminate. Ideal for vehicle wraps to achieve the wet paint look.
8519	3M™ Scotchcal™ Luster Overlaminate 8519	■	■	■	■	■	■	■	■			■	■			Industry standard for a flexible, conformable cast overlaminate.
8520	3M™ Scotchcal™ Matte Overlaminate 8520	■	■	■	■	■	■	■	■	■	■	■	■			Matte finish is perfect for indoor use or to provide a unique look to vehicle wraps.
8524	3M™ Scotchcal™ Luster Overlaminate 8524												■			Designed to protect graphics made with film IJ8624 for textured surfaces.
8580	3M™ Scotchcal™ Gloss Overlaminate 8580		■	■												Taking wraps to the next level. Unrivaled conformability and lifting resistance with proprietary film technology.
8914	3M™ Scotchcal™ Optically Clear Overlaminate 8914	■	■		■									■		Use on window graphics made with film IJ8171 where optical clarity is required.
8915	3M™ Scotchcal™ Ultra-Matte Overlaminate 8915		■	■			■		■			■				Provides the ultimate matte finish.
8908*	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.
8909*	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.
3645	3M™ Scotchcal™ Luster Overlaminate 3645														■	Slip-resistant overlaminate designed specifically for floor graphics but used for table-top graphics as well.
3619	3M™ Scotchcal™ Luster Overlaminate 3619						■	■	■							Luster finish overlaminate for digitally imaged backlit sign faces.
3620	3M™ Scotchcal™ Matte Overlaminate 3620						■	■	■							Matte finish overlaminate for digitally imaged backlit sign faces.

* This product is also part of 3M's Environmental Solutions catalog. For more information, please visit 3M.com/sustainability.

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

High Performance Products — Film Characteristics

Inkjet Media

Number	IJ Media / RG Media / FN Media	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	Film Material	Cast or Non-Cast	Film Thickness (mils)	Face Finish (Gloss, Luster, Matte)	Opaque	Translucent	Transparent	Perforated
IJ380Cv3	3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3	10	■	■	■	■	■	■	■	■		Vinyl	Cast w/new Technology	2	L	■			
IJ180C*	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C, FN180C and RG180C	10	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ180Cv3*	3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3, FN180Cv3 and RG180Cv3	10	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ180	3M™ Controltac™ Graphic Film IJ180 and RG180	10	■	■	■	■	■					Vinyl	Cast	2	L				
IJ181	3M™ Controltac™ Graphic Film IJ181 and RG181	10	■	■	■	■	■					Vinyl	Cast	2	L				
IJ170Cv3	3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3	10	■	■	■	■	■	■	■			Vinyl	Cast	2	L				
IJ8150 (NEW)	3M™ Scotchcal™ Clear View Graphic Film IJ8150	7	■	■	■			■	■			Vinyl	Cast	2	G			■	
IJ3552C	3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C, FN3552C and RG3552C	8	■	■	■	■		■	■			Vinyl	Cast	2	L	■			
IJ8171	3M™ Scotchcal™ Perforated Window Graphic Film IJ8171 and RG8171	3	■		■			■				Vinyl	Cast	4	L	■			■
IJ8624	3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624 and RG8624	7	■		■			■				Vinyl	Cast	2	L	■			
IJ3630-20	3M™ Scotchcal™ Translucent Graphic Film IJ3630-20, FN3630-20 and RG3630-20	7	■	■	■			■			■	Vinyl	Cast	2	M		■		
IJ3650-10	3M™ Scotchcal™ Graphic Film IJ3650-10	10	■	■	■	■		■			■	Vinyl	Cast	2	L	■			
IJ3650-114	3M™ Scotchcal™ Graphic Film IJ3650-114, FN3650-114 and RG3650-114	8	■	■	■	■		■			■	Vinyl	Cast	2	L			■	
IJ160C	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C and RG160C	7	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
IJ160	3M™ Controltac™ Graphic Film IJ160 and RG160	7	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
3545C*	3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C and RG3545C	3	■	■	■	■		■				Poly-olefin	Non-Cast	4	M	■			
IJ3555	3M™ Scotchcal™ Changeable Graphic Film IJ3555 and RG3555	2	■	■	■			■				Vinyl	Non-Cast	4	M	■			
IJ3470	3M™ Scotchcal™ Graphic Film IJ3470 and RG3470	7	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
IJ162-10	3M™ Controltac™ Graphic Film IJ162-10 and RG162-10	1	■	■	■							Vinyl	Non-Cast	4	M	■			
IJ162-114	3M™ Controltac™ Graphic Film IJ162-114	1	■		■							Vinyl	Non-Cast	4	M			■	
8522	3M™ Scotchcal™ Changeable Opaque Imaging Media 8522	3	■		■			■				Plastic		7	M	■			
8566	3M™ Inkjet Floor Graphics Kit 8566	0.5	■		■							Plastic		7	M	■			
Panagraphics III	3M™ Panagraphics™ III Wide Width Flexible Substrate	6	■									Vinyl		20	L		■		

IJ Media (IJ = forward wound, unnotched core); RG Media (RG = reverse wound, notched core); FN Media (FN = forward wound, notched core)

* This product is also part of 3M's Environmental Solutions catalog. For more information, please visit 3M.com/sustainability.

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

NOTE: RG films are available only with a 3M Basic Warranty.

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

Adhesive Color	Scotchcal Pressure-Sensitive	Scotchcal with Comply v3 Pressure-Sensitive with Non-Visable Air Release Channels	Controltac Pressure-Activated	Controltac with Comply Pressure-Activated with Air Release Channels	Controltac with Comply v3 Pressure-Activated with Non-Visable Air Release Channels	Adhesive Strength (High, Medium)	Permanent	Removable	Changeable	Inkjet – Solvent/ecoSolvent	Inkjet – UV	Inkjet – Latex	Inkjet – Aqueous	Electronic Cut	Kiss Cut & Die Cut	Hand Cut	Polyethylene-coated Paper	Layflat	Core Sizes (in inches)	Roll Widths (in inches)	Roll Lengths (in yards unless otherwise specified)
Gray					✓	H		✓		✓	✓	✓		✓	✓	✓	✓	✓	3	54	25/50
Gray				✓		H		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 36, 48, 54, 60	25/50/100/150/200
Gray					✓	H		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 36, 48, 54, 60	25/50/100/150/200
Gray			✓			H		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 36, 48, 54, 60	25/50/100/150/200
Gray			✓			H	✓			✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48	25/50/100/150/200
Gray		✓				H		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	54, 60	25/50/100/150/200
Clear	✓					M			✓	✓	✓	✓		✓	✓	✓		✓	3	54, 60	25/50
Gray				✓		M			✓	✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48, 54, 60	50/100/150/200
Black	✓					M		✓		✓				✓	✓	✓	✓	✓	3, 6	36, 53.5	10/25/50/100/150/200
Gray	✓					H		✓		✓					✓	✓	✓	✓	3, 6	30 / 54	50/100/150/200 / 25/50/100/200
Clear	✓					H	✓			✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48, 54, 60	50/100/150/200
Gray	✓					H	✓			✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 48, 54, 60	25/50/100/150/200
Clear	✓					H	✓			✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48, 54, 60	50
Gray				✓		M		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 48, 54, 60	50/100/150/200
Gray			✓			M		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	30, 48, 54, 60	50/100/150/200
Gray				✓		M		✓		✓	✓			✓		✓	✓	✓	3, 6	48, 54	50/100
Gray	✓					M			✓	✓	✓	✓			✓	✓	✓	✓	3, 6	30, 48, 54, 60	50/100/150/200
Gray	✓					M		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	54	50/100/150/200
Gray			✓			M		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48, 54, 60	25/50/100/150/200
Clear			✓			M		✓		✓	✓	✓		✓	✓	✓	✓	✓	3, 6	48, 54	50
Gray	✓					M			✓				✓		✓	✓	✓	✓	3	36, 54	15
Gray	✓					M			✓				✓		✓	✓	✓	✓	3	36, 54 (Kit contains print media, overlaminate and 3 application kits)	15
										✓	✓	✓						✓	3	59, 79, 98, 102, 126, 150, 165	164 ft.

** Check with your 3M Distributor for RG or FN media availability.

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

High Performance Products — Film Characteristics

Reflective Media

Number	Product	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	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 and RG680CR	9	■	■	■	■	■	■				Vinyl	N/A	7	L	■	
IJ680	3M™ Scotchlite™ Reflective Graphic Film IJ680 and RG680	9	■	■	■	■	■	■				Vinyl	N/A	7	L	■	
IJ5100R	3M™ Scotchlite™ Reflective Graphic Film IJ5100R and RG5100R	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	■	

NOTE: RG films are available only with a 3M Basic Warranty.

Overlaminates for Protection of Inkjet Printed Media

Number	Product	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	Film Material	Cast or Non-Cast	Film Thickness (mils)	Face Finish (Gloss, Luster, Matte)	Retro-Reflective	Transparent
NEW 8528	3M™ Scotchcal™ Overlaminate 8528	9	■	■	■	■	■	■	■			Vinyl	Cast	2	G		■
8580	3M™ Scotchcal™ Gloss Overlaminate 8580	7	■	■	■	■	■	■		■		Vinyl	Cast w/new Technology	1.2	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	2	■		■							Vinyl	Cast	8	L		■
3619	3M™ Scotchcal™ Luster Overlaminate 3619	9									■	Vinyl	Cast	2	L		■
3620	3M™ Scotchcal™ Matte Overlaminate 3620	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 in the rear of this catalog or the appropriate base film 3M Product Bulletin.

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

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

Adhesive Color	ADHESIVE CHARACTERISTICS — FEATURES: Pressure-Sensitive	Pressure-Activated	Pressure-Activated with Air Release Channels	REMOVABILITY: Permanent	Removable	INK COMPATIBILITY: Inkjet – Solvent/ecoSolvent	Inkjet – UV	Inkjet – Latex	Inkjet – Aqueous	CUTTING METHOD: Electronic Cut	Kiss Cut	Die Cut	Hand Cut	LINER: Kraft Paper	Polyethylene-coated Paper	Polyester	Layflat	Core Sizes (in inches)	Roll Widths (in inches)	Roll Lengths (in yards unless otherwise specified)
White			●		●	●	●	●		●	●	●	●		●		●	3, 6	36, 48	50/100 Non-standard lengths available
Clear		●		●		●	●	●		●	●	●	●		●		●	3, 6	36, 48	50/100 Non-standard lengths available
White	●				●	●	●	●		●	●	●	●		●		●	3	48	10/50 Non-standard lengths available
Clear	●			●		●	●	●		●	●	●	●		●		●	3	48	10/50 Non-standard lengths available
White	●			●		●	●			●	●	●	●		●		●	3	48	50 Non-standard lengths available
Clear	●			●		●	●	●		●	●	●	●			●	●	3	54	25/50
Clear	●			●		●	●	●		●	●	●	●	●				3	54	25/50
Clear	●			●		●	●	●	●	●	●	●	●			●	●	3	30, 36, 48.5, 54, 60	25/50/100 Non-standard lengths available
Clear	●			●		●	●	●	●	●	●	●	●	●				3	36, 48.5, 54, 60	25 /50/100 Non-standard lengths available
Clear	●			●		●	●	●	●	●	●	●	●	●				3	36, 48.5, 54, 60	25/50/100 Non-standard lengths available
Clear	●			●		●					●	●	●	●				3	30 / 54	50 / 25/50
Optically Clear	●			●		●						●	●			●	●	3	36, 48, 54	10/50 Non-standard lengths available
Clear	●			●		●	●			●	●	●	●	●				3	49, 54, 60	50 Non-standard lengths available
Clear	●			●		●	●					●	●	●				3	54	50/100 Non-standard lengths available
Clear	●			●		●	●					●	●	●				3	49, 54	50/100 Non-standard lengths available
Clear	●			●		●	●			●	●	●	●	●				3	36, 48, 54	50 Non-standard lengths available
Clear	●			●		●	●		●	●	●	●	●	●				3	48, 54, 60	50 Non-standard lengths available
Clear	●			●		●	●		●	●	●	●	●	●				3	48, 54, 60	50 Non-standard lengths available

* Check with your 3M Distributor for RG media availability.

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

Intermediate Products
P-O-P Solutions

POP Solutions with Permanent Adhesive

3M™ Scotchcal™ Graphic Film IJ35 offers outstanding print quality and excellent hiding power at an economical price. For short-term sign, architectural, display and exhibit applications, turn to the permanent adhesive of film IJ35. Also, look for 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ35C.

Easy Installation without Surface Damage

To meet your need for general sign, POP and floor graphic applications, count on the versatility of 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C. Air release channels in the adhesive enable fast, easy, virtually bubble-free applications, reducing the risk of waste. The adhesive is removable from most substrates. 3M™ Wall Decorating Film IJ86E is designed specifically for interior walls. Air release channels and a changeable adhesive allow you to slide it, reposition it and apply it without bubbles.

Window & Backlit
Solutions

3M™ Scotchcal™ Perforated Window Graphic Film IJ65 is the all-weather perforated window film solution for vehicles. 3M™ Scotchcal™ Perforated Window Graphic Film IJ66 gives end users maximized exterior promotion space for retail, building and bus applications without compromising the experience.

Change Your Window Message Frequently

3M™ Changeable Window Graphic Film IJ61 is a clear product designed for short-term window applications. Its low-tack adhesive makes for easy removal. 3M™ Scotchcal™ Changeable Translucent Film IJ63-20 offers the benefits of clean, easy removal without heat from most surfaces, and no adhesive residue.*

Short-term Window and Backlit Applications

Film IJ63 adheres to both acrylic and glass surfaces, allowing you to consolidate inventory and increase cash on hand.

*Some heat may be required in cold temperatures. Refer to the 3M Product Bulletin.

Outstanding image quality
& consistency at the right price!

10 Series	30 Series	40 Series	60 Series	Other	
Economy Grade for Flat Applications	General Sign & Flat Transit	Simple Curve & Transit Wrap	Window & Backlit	Film Options	Overlaminates

Transit
Solutions

Meet your short-term transit needs with truly changeable graphic films and removable perforated window films from 3M.

Bus King and Queen Applications

For bus king and queen applications, 3M™ Transit Ad Graphic Film IJ36-20–with great hiding power–applies efficiently and removes without heat.

Partial and Full Wrap Applications

For tougher partial and full wrap applications, step up to 3M™ Transit Wrap Graphic Film IJ46-20. Film IJ46's optimized construction allows for improved installation and removal speed on large panel jobs, while still priced to meet customer needs.

Use 3M™ Scotchcal™ Gloss Overlaminate 8508 or 3M™ Scotchcal™ Luster Overlaminate 8509 for graphic protection when required.

Complete the Job

Finish your transit work with 3M™ Scotchcal™ Perforated Window Graphic Film IJ66. The thick construction and increased print area of film IJ66 at an intermediate price makes it ideal for a wide range of short-term window needs.* Use 3M™ Scotchcal™ Optically Clear Overlaminate 8914 or 3M™ Scotchcal™ Gloss Overlaminate 8518 for graphic protection when required.

*Check your local state regulations before applying window film.

Partial Wrap
Solutions

3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C is not just for general signs, POPs and floor graphics anymore. It is now recommended for partial vehicle wraps on flat and simple curves. The versatility of this film means reduced inventory, saving time and money.

3M Intermediate
Products

Intermediate Products — Film Characteristics

Whether your need is for general sign, window, bus king/queen, bus wrap or partial vehicle wrap applications, the 3M Intermediate Products portfolio has a quality solution at the right price for your business.

Number	Product	Features & Benefits	Window or Glass	Flat Vehicle Graphics*	Bus Wraps*	Bus King/Queen	Partial Wrap*	General Signs/POP	Smooth Wall	Interior Floor	Short Term Backlit	Application Feature	Expected Performance Life**
10 Series — Economy Grade for Flat Applications													
IJ10-10T, IJ10-20T (Coming Soon!)	3M™ Scotchcal™ Graphic Film IJ10-10T and IJ10-20T	Economy grade, digitally printable, permanent, clear adhesive product. Available in gloss and matte finish.						■	■			Flat & Simple Curves	3 yr
IJ11-10, IJ11-20 (Coming Soon!)	3M™ Scotchcal™ Graphic Film IJ11-10 and IJ11-20	Economy grade, digitally printable, permanent, gray adhesive product. Available in gloss and matte finish.						■	■			Flat & Simple Curves	3 yr
IJ10-114 (Coming Soon!)	3M™ Scotchcal™ Graphic Film IJ10-114	Economy grade, digitally printable, permanent adhesive product. This clear film can be used as an overlaminate or a digitally printable clear.						■	■			Flat & Simple Curves	3 yr
30 Series — General Sign & Flat Transit													
IJ35E-20R	3M™ Scotchcal™ Graphic Film IJ35E-20R	Environmentally preferred polyolefin film with no polyvinyl chloride or monomeric plasticizers in its construction. Removable. Matte finish.	■					■	■			Flat & Simple Curves	1 yr
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
40 Series — Simple Curve & Transit Wrap													
IJ40C-10R, IJ40C-20R	3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C-10R and IJ40C-20R	Excellent imageability, air release technology, 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) 3 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 — Window & Backlit													
IJ61 (NEW)	3M™ Changeable Window Graphic Film IJ61	Clear product designed for short-term window applications. Low-tack adhesive makes for easy removal of this budget-conscientious film.	■					■				Flat & Simple Curves	1 yr
IJ63	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
IJ65	3M™ Scotchcal™ Perforated Window Graphic Film IJ65	50/50 hole pattern allows for easier see-through and safer for vehicle applications. This versatile product is a cost effective solution for vehicle, store front, and other window applications. Removable.	■			■	■	■				Flat & Simple Curves	1 yr
IJ66	3M™ Scotchcal™ Perforated Window Graphic Film IJ66	Thick construction and increased print area offer excellent image quality in building, retail and bus applications. 40 percent die-perforated pattern. Removable.	■			■		■				Flat & Simple Curves	1 yr
Other 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
IJ86E	3M™ Wall Decorating Film IJ86E	Environmentally preferred polyolefin film with no polyvinyl chloride or monomeric plasticizers in its construction. Provides excellent adhesion and removability in interior environments.						■	■	■		Flat & Simple Curves	6 mo
Overlaminates													
8508	3M™ Scotchcal™ Gloss Overlaminate 8508	Provides graphic protection when applied over most 3M Intermediate Products.	■	■	■	■	■	■	■			Flat & Simple Curves	3 yr
8509	3M™ Scotchcal™ Luster Overlaminate 8509	Provides graphic protection when applied over most 3M Intermediate Products.	■	■	■	■	■	■	■			Flat & Simple Curves	3 yr
8908, 8909	3M™ Scotchcal™ Luster Overlaminate 8908 and Matte Overlaminate 8909	Environmentally preferred polyolefin film with no polyvinyl chloride or monomeric plasticizers in its construction.	■	■		■	■	■	■		■	Flat & Simple Curves	1 yr
3648	3M™ Scotchcal™ High Gloss Overlaminate 3648	Provides protection from dirt, foot traffic and other environmental factors when applied over films IJ162, IJ40C-10R and IJ40C-20R.								■		Interior Floor Overlaminate	3 mo

* Not recommended for vehicle wraps or compound curve applications where film stretching is required.

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

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

	Face Film Characteristics			Adhesive Characteristics						Availability		
Film Material	Film Thickness (mils)	Face Finish (Gloss, Matte, Luster)	Film Opacity	Adhesive Color	Adhesive Features (permanent unless otherwise specified)	Ink Compatibility***	Latex Printable	Liner	Optional Graphic Protection	Core Sizes (in inches)	Roll Widths (in inches unless otherwise specified)	Roll Lengths (in yards unless otherwise specified)
Non-Cast Vinyl	3.1	-10T = G -20T = M	Opaque	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV, Latex	■	Polycoated Paper	8508, 8509, IJ10-114	3	54	54.7 (50 meters)
Non-Cast Vinyl	3.1	-10 = G -20 = M	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV, Latex	■	Polycoated Paper	8508, 8509, IJ10-114	3	54	54.7 (50 meters)
Non-Cast Vinyl	3.1	G	Clear	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV, Latex	■	Polycoated Paper	8508, 8509, IJ10-114	3	54	54.7 (50 meters)
Non-Cast Polyolefin	4	M	Opaque	Gray with hiding power	Pressure-Sensitive, Removable	Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex		Layflat Polycoated Paper	8908, 8909	3	54	50/100
Non-Cast Vinyl	3.2	-10 = G -20 = M	Opaque	Gray with hiding power	Pressure-Sensitive	Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex	■	Layflat Polycoated Paper	8508, 8509, 8518, 8519, 8520	3, 6	30, 54, 60.5	50/100 (3" core) 200 (6" core) 2,300
Non-Cast Vinyl	3.2	-10 = G -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, 8518, 8519, 8520	3	30 / 54 / 60	50 / 50/100/200 (3" and 6" core) / 50
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, 8518, 8519, 8520	3, 6	54, 61.5	54" x 50 (3"core) 61.5" x 50/100 (3" core) 61.5" x 100/200 (6" core)
Non-Cast Vinyl	3	-10R = G -20R = M	Opaque	Gray with hiding power	Pressure-Sensitive with Air Release Channels, Removable	Screen Print, Inkjet – Solvent/ecoSolvent, UV, Latex	■	Layflat Polycoated Paper	8508, 8509, 8518, 8519, 8520	3, 6	30, 54, 60	50/100 (3" core) 200 (6" core)
Non-Cast Vinyl	4	M	Opaque	Gray with hiding power	Pressure-Sensitive, Changeable	Inkjet – Solvent/ecoSolvent, UV, Latex	■	Layflat Polycoated Paper	8508, 8509, 8519, 8520	3, 6	54, 60	50/100 (3" core) 100/200 (6" core)
Non-Cast Vinyl	3	G	Transparent	Clear	Pressure-Sensitive, Changeable	Inkjet & Screen Print – Solvent/ecoSolvent, UV	■	Layflat Polycoated Paper	N/A	3	54	50
Non-Cast Vinyl	3.2	M	Translucent	Clear	Pressure-Sensitive, Changeable	Inkjet – Solvent/ecoSolvent, UV	■	Layflat Polycoated Paper	8508, 8509, 8519, 8520	3, 6	54, 60	50/100 (3" core) 200 (6" core)
Perforated Non-Cast Vinyl	6	M	Perforated	Clear	Pressure-Sensitive, Removable	Inkjet – Solvent/ecoSolvent, UV		Double-Sided Polycoated Paper	8914, 8518	3	54 / 27, 54†	50 m / 10 m/25 m/50 m†
Perforated Non-Cast Vinyl	5.8	M	Perforated	Clear	Pressure-Sensitive, Removable	Inkjet – Solvent/ecoSolvent		Double-Sided Polycoated Paper	8914, 8518	3	54 / 27, 54†	50 m / 10 m/25 m/50 m†
Non-Cast Vinyl	4	M	Opaque	Gray	Pressure-Activated, Removable	Inkjet – Solvent/ecoSolvent, UV	■	Layflat Polycoated Paper	3645	3	54	50
Polyolefin	6	M	Opaque	Gray	Pressure-Activated with Air Release Channels, Changeable	Inkjet – UV, Screen Print		Polyethylene Coated Paper	N/A	3	60	50
Intermediate Cast Vinyl	2.3	G	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	N/A	Kraft Paper	N/A	3	54	50
Non-Cast Vinyl	3	L	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	N/A	Kraft Paper	N/A	3	30, 54, 61	50/100/200
Non-Cast Polyolefin	2.5	8908 = L 8909 = M	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	N/A	Kraft Paper	N/A	3	54	50 (Non-standard lengths available)
Non-Cast Vinyl	6	G	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	N/A	Kraft Paper	N/A	3	54	50

738 Sq. Ft. Rolls

*** 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.

Clear Coats and Inks

Clear Coats

Number	Product	APPLICATION METHOD		CLEAR COAT CHARACTERISTICS				AVAILABILITY (GALLONS)	EXPECTED PERFORMANCE LIFE†	COMMON APPLICATIONS*				
		Liquid Laminator	Screen Press	Aqueous	Solvent	UV-Curable	Gloss Level			Inkjet–Solvent	Inkjet–UV	Inkjet–Aqueous	Screen Print–Solvent	Screen Print–UV
1920DR	3M™ Screen Print Gloss Clear 1920DR		■		■		Gloss	1	8	■		■	■	
8530	3M™ Piezo Inkjet Protective Clear 8530	■		■			Luster	5	3	■				
9720i	3M™ Screen Print Gloss Clear 9720i		■			■	Gloss	1 and 5	8	■	■		■	■
9720UV	3M™ Screen Print Gloss Clear 9720UV		■			■	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 warranted durabilities for recommended graphic constructions are provided in the warranty matrices in this catalog or the applicable base film 3M Product Bulletin.

Solvent Inks

Number	Product	PRINTER PLATFORM	DESCRIPTION	AVAILABILITY (GALLON, LITER)	COMMON APPLICATION SURFACES					
					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.	G	■	■	■	■	■	■
5500	3M™ Piezo Inkjet Ink Series 5500	Océ Arizona 600 Printer	Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.	G	■	■	■	■	■	
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.	L	■	■	■	■	■	■
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.	L	■	■	■	■	■	
6200	3M™ Piezo Inkjet Ink Series 6200	Agfa :Jeti 3312, 3324 and 5024 Printers	Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.	G	■	■	■	■	■	■

Latex Inks

Number	Product	PRINTER PLATFORM	DESCRIPTION	AVAILABILITY	Flat	Flat with Rivets	Corrugated	Simple & Moderate Curves	Compound Curves	Flexible Substrates
LX600	HP 3M Specialty Latex Inks*	HP Designjet L65500, Scitex LX600, LX800, LX820 and LX850 Printers	Latex-based, pigmented, weather-resistant with overlaminate. Excellent color vibrancy. Available in standard and CMYK colors plus Light Cyan and Light Magenta.	L	■	■	■	■	■	■

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

UV Inks

Number	Product	PRINTER PLATFORM	DESCRIPTION	AVAILABILITY	Flat	Flat with Rivets	Corrugated	Simple & Moderate Curves	Compound Curves	Flexible Substrates
NEW 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.	L	■	■	■	■	■	■
NEW 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.	L	■	■	■	■	■	■
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.	L	■	■	■	■	■	■
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.	L	■	■	■	■	■	■
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.	L	■	■	■	■	■	■
5400UV	3M™ Piezo Inkjet Ink Series 5400UV	HP Designjet H35000/H45000 and ColorSpan 5400UV Series Printers	UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan and Light Magenta.	L	■	■	■	■	■	■
F200	Mimaki F200 UV Ink* (Manufactured by 3M)	Mimaki JF-1610 and 1631 Printers	UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta and White.	20kg	■	■	■	■	■	■
LF200	Mimaki LF200 UV Ink* (Manufactured by 3M)	Mimaki UJV-160, JFX-1631 and JFX-1615R Printers	UV LED-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK.	20kg	■	■	■	■	■	■

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

For complete product details and warranted applications, go to 3Mgraphics.com and select Technical Bulletins.

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™ 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™ Controltac™ Graphic Film IJ380 does not require primer 94 in deep channels on vehicle wraps.

3M™ Edge Sealing Tape 8914
Used to improve the resistance to environmental damage and enhance the durability of the graphics.

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™ 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™ 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™ Vehicle Channel Applicator Tool VCAT-2
Custom designed durable soft foam roller for vehicle channels.

3M™ Air Release Tool 391x
Puncture film that has already been applied to a substrate to remove entrapped air bubbles.

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™ Roller L (large)
Custom designed durable firm roller for vehicle channels.

3M™ Roller S (small)
Custom designed durable firm roller used as finishing tool in vehicle channels.

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.

St. Paul, MN
USA

Phoenix, AZ
USA   Houston, TX
USA   Miami, FL
USA

Ribeirao Preto
Brazil

Extreme
Proven Performance
The 3M

Unparalleled Commitment to Durability Testing

Solentuna SW
Lochem NE
Hilden GE
Bandol FR
Madrid SP
Yamagata Japan
Okinawa Japan
Dhahran SA
Bangkok
Singapore
Tully Australia
Townsville Australia
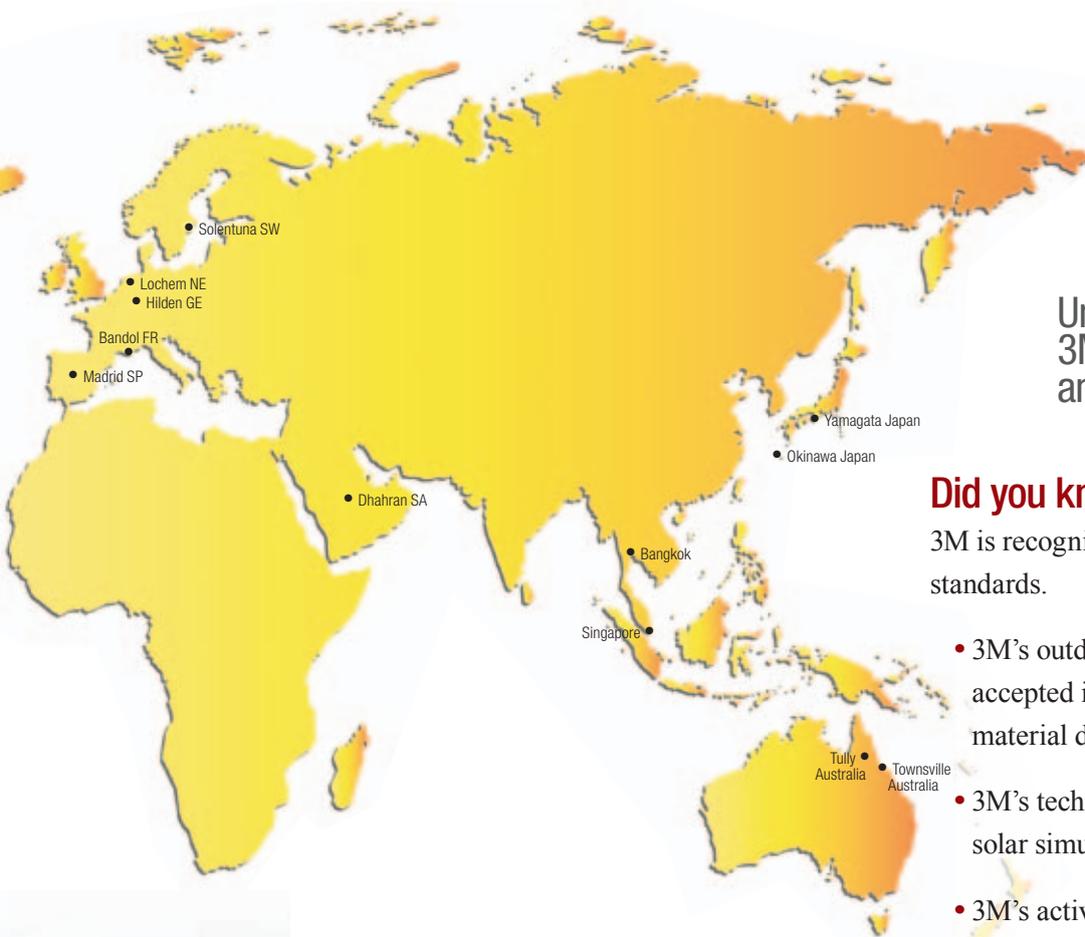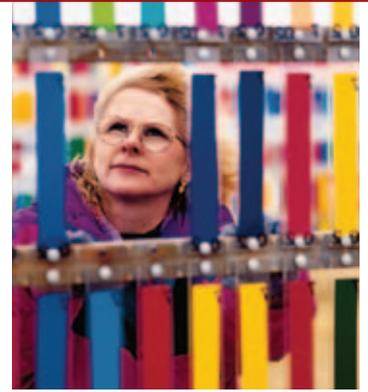
Unlike other manufacturers,
3M tests both finished graphics
and individual components

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 3M Films and Graphic
Protection Used with Qualified Inks
3M Performance Guarantee
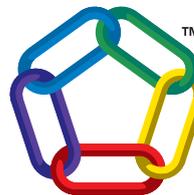
For Finished Graphics
Using All 3M Components
3M™ MCS™ Warranty

3M™ MCS™ Warranty

Conditions
Difference

Peace of Mind

Backed by the strength of three rock solid warranties

We offer you a choice in 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.

Training

Training Classes: with your Local 3M Distributor
• 1–3 day installation seminars held locally for your convenience
• Contact your local 3M Distributor for dates and details

3M World Headquarters Training Classes:
• Three day advanced installation training course
• 3M would like to validate your installation skills and promote your services.
• Visit 3Mgraphics.com/installationprograms or call 1-800-328-3908 to learn more.
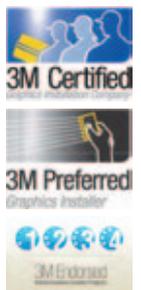
Where to Buy:

For assistance on where to buy, visit 3Mgraphics.com.

Support

Looking for Technical Bulletins, Color Profiles or the Product Selector?

Visit our website at 3Mgraphics.com or contact your 3M Distributor.

Need to speak to someone?

For General Information: 1-800-374-6772
For Technical Information: 1-800-328-3908

For sample rolls, or to order products in this guide, please visit 3Mgraphics.com/samples or contact your 3M Distributor.

Photo Captions

Cover:

HHR Vehicle — 3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3 and 3M™ Scotchcal™ Gloss Overlaminate 8580

MN Orchestra Hall Perforated Window Graphic — 3M™ Scotchcal™ Perforated Window Graphic Film 8171

Page 2:

Big Ink Vehicle — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8518
2008 Wrap to Win Contest Grand Prize Winner

CSN Vehicle — 3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8518

Public Library Parking Garage — 3M™ Scotchcal™ Translucent Graphic Film IJ3630-20 and 3M™ Scotchcal™ Matte Overlaminate 8520

Page 3:

ABC 10 News Vehicle — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8528

USPS Night Graphic — 3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive IJ680CR-10 and 3M™ Scotchcal™ Luster Overlaminate 8519

Page 10:

In Style In Season Wall Graphic — 3M™ Wall Decorating Film IJ86E

FIT RX Vehicle — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8518; 3M™ Scotchcal™ Perforated Window Graphic Film IJ66 and 3M™ Scotchcal™ Optically Clear Overlaminate 8914

Page 11:

Bus Graphic — 3M™ Transit Ad Graphic Film IJ36

Treatseats Floor Graphic — 3M™ Controltac™ Graphic Film 162-10

McNamara Florist Vehicle — 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C

Page 18:

Rapala Boat Wrap — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8518

Lexus Dealership Textured Surface Graphic — 3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624 and 3M™ Scotchcal™ Luster Overlaminate 8524
Entire storefront image is a textured surface graphic

Goya Hauler — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Luster Overlaminate 8519. Rear panel is 3M™ Transit Ad Graphic Film IJ36 and 3M™ Scotchcal™ Luster Overlaminate 8519

NASCAR® Race Car — 3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3-10 and 3M™ Scotchcal™ Gloss Overlaminate 8518

NASCAR® is a registered trademark of the National Association for Stock Car Auto Racing, Inc. Roush Fenway Racing Trademarks, Greg Biffle's name and/or likeness used by Authority of Roush Fenway Racing, LLC.

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.

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.

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.

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.

3M™ Scotchcal™ Graphic Film — 3M brand name for films with pressure-sensitive adhesive that bonds upon contact.

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.

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.

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.

FN — Inkjet printable film prefix that indicates the film is forward wound on a notched core.

IJ — Inkjet printable film prefix that indicates the film is forward wound on an unnotched core.

Inkjet — Method of digital printing. Also referred to as thermal inkjet.

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.

Permanent Adhesive — Adhesive that is not intended to be removable.

Positionable or Repositionable (As used in 3M™ Controltac™ Graphic Films only) — 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.

Pressure-Activated Adhesive (As used in 3M™ Controltac™ Graphic Films) — 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.

Pressure-Activated Adhesive (As used in 3M™ Scotchlite™ Graphic Films IJ680 and IJ680CR) — Slideable 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.

Pressure-Sensitive Adhesive — Adheres upon contact to the substrate. Does not slide and cannot be repositioned.

Removable Adhesive — Can be removed with heat and/or chemicals with up to 30 percent adhesive residue.

RG — Inkjet printable film prefix that indicates the film is reverse wound on a notched core.

Simple Curves — A surface with a two-dimensional curve.

Slideable (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.

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

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.

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