3M Graphics Market Center
Inkjet Printing Materials for Solvent,
UV and Aqueous Printing

October, 2009

Your Power over Wraps

3M

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

Creative
Solutions
to Accelerate Your Success

3M Promotional
Products Inside!
See page 10

3M

3M Graphics Market Center

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

Grand Prize Winner*

*2008 Wrap to Win Contest

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.

Courtesy of www.csn.org
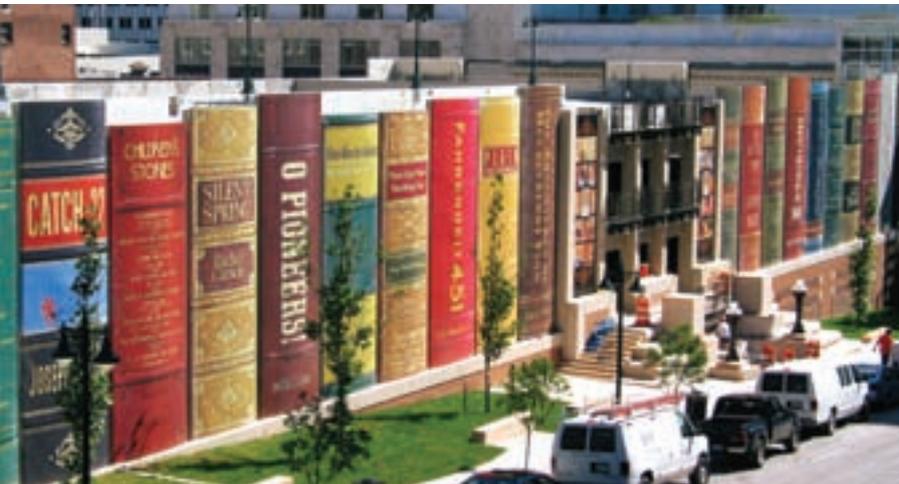
Ingenious
Solutions that help you grow

When it comes to new products, 3M's research and development teams use our 30+ 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

Good looks that last longer
- Offer customers a variety of graphic protection options–from graffiti protection to slip resistance 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 piezo 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 and transparent films, and overlaminates
- Available in:
  - 50 yard (or less) rolls
  - 100 yard rolls on 6" cores
  - 54" x 100 yard rolls on 3" cores for films IJ180Cv3, IJ180C and overlaminates 8518, 8519 and 8520

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to deliver
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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	Product	Fleet (commercial trailer, truck, tractor) and Vehicle Graphics	Vehicle Wraps	Watercraft	Transit (bus, passenger train)	Label (warning, informational)	Signage – Backlit	Signage – Non-Backlit	Awning	Banner	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 (RG & FN also available)	■	■	■	■			■			■		■		Industry standard for vehicle graphics providing air release, repositionability, slideability and removability.	1920DR, 8518, 8519, 8520, 8530, 8908, 8909, 8915, 9720i, 9720UV
IJ180Cv3*	3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3 (RG & FN also available)	■	■	■	■			■			■		■		Cv3 air release system for wraps! Releases air like film IJ180C along with a smoother and glossier appearance.	
IJ180	3M™ Controltac™ Graphic Film IJ180 (RG also available)	■	■	■	■		■	■			■		■		Used for large wall murals providing easy installation and reliable adhesion.	
IJ170Cv3	3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3	■	■	■	■			■			■		■		Value priced solution with Cv3 air release technology for vehicle graphics.	
IJ3552C	3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C (RG & FN also available)	■	■	■				■			■		■		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 (RG also available)	■	■		■								■		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 (RG & FN also available)											■			Designed for use on textured surfaces like brick, industrial stucco and cinder block.	8524
IJ3630-20	3M™ Scotchcal™ Translucent Graphic Film IJ3630-20 (RG & FN also available)						■		■				■		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 (RG & FN also available)					■	■	■	■		■		■		Reverse image on this clear film for second surface graphics.	
IJ160C	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C (RG & FN also available)	■		■	■			■			■		■		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 (RG & FN also available)	■		■	■			■			■		■		Great for short-term graphics that require slideability.	
3545C*	3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C (RG also available)	■		■	■			■			■		■		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 (RG & FN also available)	■		■				■			■		■		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 (RG also available)	■		■	■			■			■		■		Removable film for general sign applications.	1920DR, 8518, 8519, 8520, 8530, 8915, 9720i, 9720UV
IJ162-10	3M™ Controltac™ Graphic Film IJ162-10 (RG also available)													■	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 and awnings.	3619, 3620, 8518, 8519, 8520

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

2009 Wide Format Imaging Readers' Choice

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

Reflective Media

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 and Glass	Floor	Advantages & Common Uses	Recommended Graphic Protection
IJ680CR	3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive Series IJ680CR (RG also available)	X			X	X			X							The only reflective film with air release just got better! Better slideability, better air release and better removability for easier, faster, bubble-free installations and removal.	
IJ680	3M™ Scotchlite™ Reflective Graphic Film IJ680 (RG also available)	X			X	X			X							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 Series IJ5100R (RG also available)	X			X	X			X							Removable reflective graphic film is ideally suited for cut letters, decals, vehicle markings and non-regulated signs.	
IJ5100 (NEW)	3M™ Scotchlite™ Reflective Graphic Film Series IJ5100	X			X	X			X							Permanent, engineer grade reflective film designed for excellent cutting and weeding.	
IJ5000	3M™ Scotchlite™ Reflective Graphic Film Series IJ5000	X				X			X							Perfect reflective film choice for short-term messages.	

Overlaminates for Protection of Inkjet Printed Media

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 and Glass	Floor	Advantages & Common Uses
8518	3M™ Scotchcal™ Gloss Overlaminate 8518	X	X	X	X	X	X	X	X		X	X				Offers high gloss in a highly conformable overlaminate. Ideal for vehicle wraps to achieve the wet paint look.
8519	3M™ Scotchcal™ Luster Overlaminate 8519	X	X	X	X	X	X	X	X	X	X	X				Industry standard for a flexible, conformable cast overlaminate.
8520	3M™ Scotchcal™ Matte Overlaminate 8520	X	X	X	X	X	X	X	X	X	X	X	X			Matte finish is perfect for indoor use or to provide a unique look to vehicle wraps.
8524	3M™ Scotchcal™ Luster Overlaminate 8524												X			Designed to protect graphics made with film IJ8624 for textured surfaces.
8580	3M™ Scotchcal™ Gloss Overlaminate 8580		X	X												Taking wraps to the next level. Unrivaled conformability and lifting resistance with proprietary film technology.
8914	3M™ Scotchcal™ Optically Clear Overlaminate 8914	X	X		X									X		Use on window graphics made with film IJ8171 where optical clarity is required.
8915	3M™ Scotchcal™ Ultra-Matte Overlaminate 8915		X	X			X		X			X				Provides the ultimate matte finish.
8908*	3M™ Scotchcal™ Luster Overlaminate 8908	X			X				X			X		X		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	X			X				X			X		X		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														X	Slip-resistant overlaminate designed specifically for floor graphics but used for table-top graphics as well.
3619	3M™ Scotchcal™ Luster Overlaminate 3619	X	X		X	X						X	X	X		Luster finish overlaminate for digitally imaged backlit sign faces.
3620	3M™ Scotchcal™ Matte Overlaminate 3620	X	X		X	X						X	X	X		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 (IJ = forward wound, unnotched core) / RG Media (RG = reverse wound, notched core) / FN Media (FN = forward wound, notched core)	Expected Durability, 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	5	■	■	■	■	■	■	■	■		Vinyl	Cast w/new Technology	2	L	■			
IJ180C*	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C (RG & FN also available)	8	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ180Cv3*	3M™ Controltac™ Graphic Film with Comply™ v3 Adhesive IJ180Cv3 (RG & FN also available)	8	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ180	3M™ Controltac™ Graphic Film IJ180 (RG also available)	8	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ170Cv3	3M™ Scotchcal™ Graphic Film with Comply™ v3 Adhesive IJ170Cv3	8	■	■	■	■	■	■	■			Vinyl	Cast	2	L	■			
IJ3552C	3M™ Controltac™ Changeable Graphic Film with Comply™ Adhesive IJ3552C (RG & FN also available)	2	■	■	■	■		■	■			Vinyl	Cast	2	L	■			
IJ8171	3M™ Scotchcal™ Perforated Window Graphic Film IJ8171 (RG also available)	2	■		■			■				Vinyl	Cast	4	L	■			■
IJ8624	3M™ Scotchcal™ Graphic Film for Textured Surfaces IJ8624 (RG & FN also available)	1			■			■				Vinyl	Cast	2	L	■			
IJ3630-20	3M™ Scotchcal™ Translucent Graphic Film IJ3630-20 (RG & FN also available)	6	■	■	■			■			■	Vinyl	Cast	2	M		■		
IJ3650-10	3M™ Scotchcal™ Graphic Film IJ3650-10	8	■	■	■			■			■	Vinyl	Cast	2	L	■			
IJ3650-114	3M™ Scotchcal™ Graphic Film IJ3650-114 (RG & FN also available)	5	■	■	■			■			■	Vinyl	Cast	2	L			■	
IJ160C	3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ160C (RG & FN also available)	5	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
IJ160	3M™ Controltac™ Graphic Film IJ160 (RG & FN also available)	5	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
3545C*	3M™ Controltac™ Removable Graphic Film with Comply™ Adhesive 3545C (RG also available)	3	■	■	■			■				Poly-olefin	n/a	4	M	■			
IJ3555	3M™ Scotchcal™ Changeable Graphic Film IJ3555 (RG & FN also available)	2	■	■	■			■				Vinyl	Non-Cast	4	M	■			
IJ3470	3M™ Scotchcal™ Graphic Film IJ3470 (RG also available)	3	■	■	■	■		■				Vinyl	Non-Cast	4	M	■			
IJ162-10	3M™ Controltac™ Graphic Film IJ162-10 (RG also available)	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		■		

Column groups: Durability and Warranties (Expected Durability Unprinted Years†, 3M MCS Warranty, Performance Guarantee); Application Surfaces (Flat, Flat with Rivets, Corrugated, Simple Curves, Compound Curves, Deep Channels and Concave Surfaces, Flexible Substrates); Film Characteristics — Face Characteristics (Film Material, Cast or Non-Cast, Film Thickness mils, Face Finish Gloss/Luster/Matte) and Film Opacity (Opaque, Translucent, Transparent, Perforated).

* 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.

For complete product details, 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	Controltac with Comply v2 Pressure-Activated with Non-Visable Air Release Channels	Adhesive Strength (High, Medium)	Permanent	Removable	Changeable	Inkjet – Solvent/ecoSolvent	Inkjet – UV	Inkjet – Aqueous	Electronic Cut	Kiss Cut & Die Cut	Hand Cut	Kraft Paper	Polyethylene-coated Paper	Polyester	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	54	25/50/100/150/200
Gray				■			M			■	■	■		■	■	■		■		■	3, 6	48, 54	50/100/150/200
Black	■						M		■		■			■	■	■		■		■	3, 6	36, 53.5	10/25/50/100/150/200
Clear	■						M		■		■				■	■	■	■	■	■	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	50/100/150/200
Clear	■						H	■			■	■		■	■	■		■		■	3, 6	54, 60	50/100/150/200
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	50/100/150/200
Gray	■						M			■	■	■		■	■	■		■		■	3, 6	30, 48, 54, 60	50/100/150/200
Gray	■						M		■		■	■		■	■	■		■		■	3, 6	48, 54, 60	50/100/150/200
Gray			■				M		■		■	■		■	■	■		■		■	3, 6	48, 54	25/50/100/150/200
Clear			■				M		■		■	■		■	■	■		■		■	3, 6	48, 54	25/50/100/150/200
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, 126, 163	164 ft.

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

High Performance Products — Film Characteristics

Reflective Media

Number	Product	Expected Durability, 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	Reflective	Translucent	Transparent	Perforated
IJ680CR	3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive Series IJ680CR (RG also available)	9	■	■	■	■	■	■				Vinyl	N/A	6	L		■			
IJ680	3M™ Scotchlite™ Reflective Graphic Film Series IJ680 (RG also available)	9	■	■	■	■	■	■				Vinyl	N/A	6	L		■			
IJ5100R	3M™ Scotchlite™ Reflective Graphic Film Series IJ5100R (RG also available)	7	■	■	■	■		■				Vinyl	N/A	6	L		■			
IJ5100 (NEW)	3M™ Scotchlite™ Reflective Graphic Film Series IJ5100	7	■	■	■	■		■				Vinyl	N/A	6	L		■			
IJ5000	3M™ Scotchlite™ Reflective Graphic Film Series IJ5000	1.5	■		■	■		■				Vinyl	N/A	5	L		■			

Overlaminates for Protection of Inkjet Printed Media

Number	Product	Expected Durability, 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	Reflective	Translucent	Transparent	Perforated
8580	3M™ Scotchcal™ Gloss Overlaminate 8580	3	■	■	■	■	■	■	■	■		Vinyl	Cast w/new Technology	1.2	G				■	
8518	3M™ Scotchcal™ Gloss Overlaminate 8518	3		■	■	■	■	■				Vinyl	Cast	2	G				■	
8519	3M™ Scotchcal™ Luster Overlaminate 8519	5	■	■	■	■	■	■	■		■	Vinyl	Cast	2	L				■	
8520	3M™ Scotchcal™ Matte Overlaminate 8520	5	■	■	■	■	■	■	■		■	Vinyl	Cast	2	M				■	
8524	3M™ Scotchcal™ Luster Overlaminate 8524	1			■			■				Plastic	N/A	2	L				■	
8914	3M™ Scotchcal™ Optically Clear Overlaminate 8914	2	■		■			■				Vinyl	Cast	2	G				■	
8915	3M™ Scotchcal™ Ultra-Matte Overlaminate 8915	5	■		■	■	■	■	■			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	5	■	■	■	■	■		■			Vinyl	Cast	2	L				■	
3620	3M™ Scotchcal™ Matte Overlaminate 3620	5	■	■	■	■	■		■			Vinyl	Cast	2	M				■	

† 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.

Color	Pressure-Sensitive	Pressure-Activated	Pressure-Activated with Air Release Channels	Permanent	Removable	Changeable	Inkjet – Solvent/ecoSolvent	Inkjet – UV	Inkjet – Aqueous	Electronic Cut	Kiss Cut	Die Cut	Hand Cut	Kraft Paper	Polyethylene-coated Paper	Polyester	Layflat	Core Sizes (in)	Roll Widths (in)	Roll Lengths (yds unless otherwise specified)
White			■		■		■	■		■	■	■	■		■		■	3, 6	36, 48	50/100 Non-standard lengths available
Clear		■		■			■	■		■	■	■	■		■		■	3, 6	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	30, 36, 48.5, 54, 60	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	50 Non-standard lengths available
Clear	■			■			■	■				■	■	■				3	54	50/100 Non-standard lengths available
Clear	■			■			■	■				■	■	■				3	54	50/100 Non-standard lengths available
Clear	■			■			■	■		■	■	■	■	■				3	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.

Promotional 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 & exhibit, turn to the permanent adhesive of film IJ35. Also, look for 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ35C.

Easy Installation without Surface Damage

Turn to the versatility of 3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C. The air release channels in the adhesive allow for fast, easy, virtually bubble-free applications, reducing the risk of application waste and it's removable from most substrates.

Window & Backlit
Solutions

3M™ Scotchcal™ Perforated Window Graphic Film IJ66 gives end users maximized exterior promotion space without compromising the experience.

Change Your Window Message Frequently

3M™ Scotchcal™ Changeable Translucent Film IJ63-20 and 3M™ Scotchcal™ Changeable Graphic Film IJ36-20 offer the benefit of 3M changeable adhesive.

Short-term Window and Backlit Applications

The unique ability of film IJ63 to adhere to both acrylic and glass surfaces allows you to consolidate inventory and increase cash on hand.

Short-term Cover Up for Windows

The gray adhesive in 3M™ Scotchcal™ Changeable Graphic Film IJ36 provides excellent hiding power. It applies quickly and removes easily without heat.

Outstanding image quality
& consistency at the right price!

30 Series	40 Series	50 Series	60 Series
General Sign & Flat Transit	Simple Curve & Transit Wrap	Vinyl & Mesh Banner	Window & Backlit
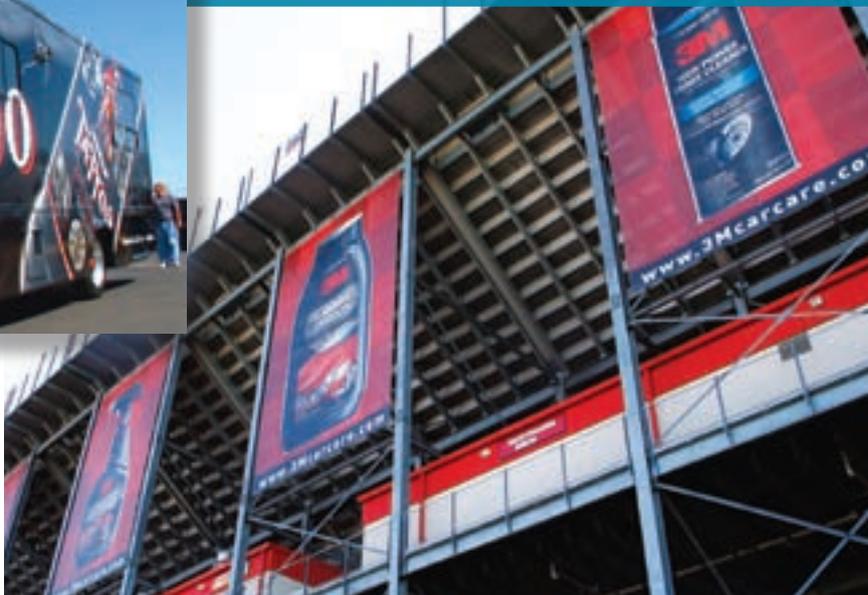
Transit
Solutions

Meet your short-term transit needs with changeable poster and wrap adhesive and removable perforated window films from 3M.

Promotional Changeability

For bus king, queen and tail applications, 3M™ Scotchcal™ Changeable Graphic Film IJ36-20 applies quickly and removes without heat.

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

Use 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 perforated film IJ66 at a promotional 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 perforated window graphic film IJ66.

Banner
Solutions

3M offers a wide selection of quality promotional banners at economical prices.

It's Your Choice

Our family of single- and double-sided vinyl and mesh banners give you the choices you need for indoor or outdoor applications. Print wide-format promotional, advertising and event banners with materials IJ51 or go grand with banner material IJ53.

3M Promotional
Products

Promotional Products — Film Characteristics

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

Series	Number	Product	Features & Benefits	Window	Flat Vehicle Graphics*	Bus Wraps	Bus King/Queen	Partial Wrap	General Signs/POP	Banner	Smooth Wall	Interior Floor	Short Term Backlit	Application Feature	Expected Performance Life**
30 Series General Sign & Flat Transit	IJ35E-20R	3M™ Scotchcal™ Graphic Film IJ35E-20R	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. Removable adhesive and matte finish.		■				■	■				Flat & Simple Curves	1 yr
	IJ35-10	3M™ Scotchcal™ Graphic Film IJ35-10	Excellent imageability, permanent adhesive, attractive price. Gloss finish.						■	■				Flat & Simple Curves	5 yr
	IJ35-20	3M™ Scotchcal™ Graphic Film IJ35-20	Excellent imageability, permanent adhesive, attractive price. Matte finish.						■	■				Flat & Simple Curves	5 yr
	IJ35C-10	3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ35C-10	Excellent imageability, air release technology, permanent adhesive, attractive price. Gloss finish.						■	■				Flat & Simple Curves	5 yr
	IJ35C-20	3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ35C-20	Excellent imageability, air release technology, permanent adhesive, attractive price. Matte finish.						■	■				Flat & Simple Curves	5 yr
	IJ36-20	3M™ Scotchcal™ Changeable 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	3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C-10R	Excellent imageability, air release technology, easy removal with heat. Ideal for POP, flat vehicle, and indoor short term floor applications. Gloss finish.		■			■	■		■	■		Flat & Simple Curves, Interior Floors	7 yr (Flat & Simple Curves) 3 mo (Floor)
	IJ40C-20R	3M™ Scotchcal™ Graphic Film with Comply™ Adhesive IJ40C-20R	Excellent imageability, air release technology, easy removal with heat. Ideal for POP, flat vehicle, and indoor short term floor applications. Matte finish.		■			■	■		■	■		Flat & Simple Curves, Interior Floors	7 yr (Flat & Simple Curves) 3 mo (Floor)
	IJ46-20	3M™ Scotchcal™ Changeable 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
50 Series Vinyl & Mesh Banner	IJ51	3M™ Single-Sided Banner Material IJ51	Excellent imageability with this 12 ounce scrim-reinforced durable banner at an attractive price.							■				N/A	6 mo
	IJ52	3M™ Double-Sided Banner Material IJ52	Excellent imageability on both sides with this durable 15 ounce banner with blockout layer.							■				N/A	6 mo
	IJ53	3M™ Mesh Banner Material IJ53	Vinyl-coated mesh fabric, in widths 2–5 m for construction, event and grand format graphics.							■				N/A	6 mo
	IJ54	3M™ Mesh Banner Material with Liner IJ54	Vinyl-coated mesh fabric includes a liner to allow printing on a greater variety of printers.							■				N/A	6 mo
60 Series Window & Backlit	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
	IJ66	3M™ Scotchcal™ Perforated Window Graphic Film IJ66	Thick construction and increased print area offer excellent image quality in building, retail and bus applications.	■		■								Flat & Simple Curves	6 mo
	IJ162	3M™ Controltac™ Graphic Film IJ162	Excellent imageability, slideable and repositionable, easy removal with heat. Great for indoor floor graphics.									■		Interior Floor	1 yr
Overlaminates	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
	8509	3M™ Scotchcal™ Luster Overlaminate 8509	Provides graphic protection when applied over most 3M Promotional Products.	■	■	■	■	■	■	■	■			Flat & Simple Curves	3 yr
	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.	■	■			■	■	■	■		■	Flat & Simple Curves	1 yr
	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.	■	■			■	■	■	■		■	Flat & Simple Curves	1 yr

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

** Maximum expected outdoor durability of unprinted films. For actual durability of specific film, ink and overlaminate combinations, refer to the appropriate base film Product Bulletin for details.

*** UV and Solvent Screen Print compatible. Be sure to test 3M Promotional Products on your own equipment and inks prior to using as conditions vary by location.

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

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 Polyolefin	4	M	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet - Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8908, 8909	3	54	50/100
Non-Cast Vinyl	3	G	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3, 6	30, 54, 60.5	50/100 (3" core) 200 (6" core)
Non-Cast Vinyl	3.2	M	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3, 6	30, 54, 60.5	50/100 (3" core) 200 (6" core)
Non-Cast Vinyl	3	G	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3	54	50/100/200 (6" core)
Non-Cast Vinyl	3.2	M	Opaque	Gray with hiding power	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3	54	50/100/200 (6" core)
Non-Cast Vinyl	3.2	M	Opaque	Gray with hiding power	Pressure-Sensitive, Changeable	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	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	G	Opaque	Gray with hiding power	Pressure-Sensitive with Air Release Channels	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3, 6	30, 54, 60	50/100 (3" core) 200 (6" core)
Non-Cast Vinyl	3	M	Opaque	Gray with hiding power	Pressure-Sensitive with Air Release Channels	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	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	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3, 6	54, 60	50/100 (3" core) 100/200 (6" core)
Vinyl	12 oz	M	Opaque	N/A	N/A	Inkjet – Solvent/ecoSolvent, UV	N/A	N/A	3	53.5, 80	50
Vinyl	15 oz	M	Opaque	N/A	N/A	Inkjet – Solvent/ecoSolvent, UV	N/A	N/A	3	53.5, 80	50
Vinyl-Coated Mesh	2–3 m 7 oz, 5 m 8 oz	M	Mesh	N/A	N/A	Inkjet – Solvent/ecoSolvent, UV	N/A	N/A	3	2 m, 3.2 m, 5 m	50 m
Vinyl-Coated Mesh with Liner	7 oz	M	Mesh	N/A	N/A	Inkjet – Solvent/ecoSolvent, UV	Strippable	N/A	3	38, 54	82 ft
Non-Cast Vinyl	3.2	M	Translucent	Clear	Pressure-Sensitive, Changeable	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	8509, 8519, 8520, 8908, 8909	3, 6	54, 60	50/100 (3" core) 200 (6" core)
Perforated Non-Cast Vinyl	5.8	M	Perforated	Clear	Pressure-Sensitive, Removable	Inkjet – Solvent/ecoSolvent, UV	Double-Sided Polycoated Paper	8914, 8518	3	54	5 m/50 m/100 m
Non-Cast Vinyl	4	M	Opaque	Gray	Pressure-Activated, Removable	Inkjet – Solvent/ecoSolvent, UV	Layflat Polycoated Paper	3648	3	54	50
Non-Cast Vinyl	6	G	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Kraft Paper	N/A	3	54	50
Non-Cast Vinyl	3	L	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Kraft Paper	N/A	3	30, 54, 61	50/100/200
Non-Cast Polyolefin	2.5	L	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Kraft Paper	N/A	3	54	50 (Non-standard lengths available)
Non-Cast Polyolefin	2.5	M	Transparent	Clear	Pressure-Sensitive	Inkjet – Solvent/ecoSolvent, UV	Kraft Paper	N/A	3	54	50 (Non-standard lengths available)

Clear Coats and Inks

Clear Coats

Number	Product	Liquid Laminator	Screen Press	Aqueous	Solvent	UV-Curable	Gloss Level	AVAILABILITY (GALLONS)	MAXIMUM DURABILITY (YEARS)†	Inkjet–Solvent/ecoSolvent	Inkjet–UV	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™ UV Gloss Clear 9720i		■			■	Gloss	1 and 5	8	■	■	■	■
9720UV	3M™ 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.

(APPLICATION METHOD = Liquid Laminator, Screen Press; CLEAR COAT CHARACTERISTICS = Aqueous, Solvent, UV-Curable, Gloss Level; COMMON APPLICATIONS = Inkjet–Solvent/ecoSolvent, Inkjet–UV, Screen Print–Solvent, Screen Print–UV)*

Solvent Inks

Number	Product	PRINTER PLATFORM	DESCRIPTION	AVAILABILITY (GALLON, QUART, LITER)	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	■	■	■	■	■	■
1700	3M™ Piezo Inkjet Ink Series 1700*	Océ Arizona 180 Printer	Promotional ink that is solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.	Q	■	■	■	■	■	
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	■	■	■	■	■	
6800	3M™ Piezo Inkjet Ink Series 6800*	Océ Arizona 90 and 180 Printers	Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.	Q	■	■	■	■	■	
4400	3M™ Piezo Inkjet Ink Series 4400	HP Scitex XLJet 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	■	■	■	■	■	■
4600	3M™ Piezo Inkjet Ink Series 4600	HP Scitex Pressjet™-W Printer	Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors.	G	■	■	■	■	■	
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	■	■	■	■	■	■
NEW 6200	3M™ Piezo Inkjet Ink Series 6200	Gandi Jeti 3312, 3324, 5024 Printers	Solvent-based, pigmented, weather-resistant, excellent color retention. Available in standard CMYK colors plus Light Cyan and Light Magenta.	G	■	■	■	■	■	■

*ONLY available by contacting Océ at 800-323-4827.

(COMMON APPLICATION SURFACES = Flat, Flat with Rivets, Corrugated, Simple & Moderate Curves, Compound Curves, Flexible Substrates)

UV Inks

Number	Product	PRINTER PLATFORM	DESCRIPTION	AVAILABILITY (GALLON, QUART, LITER)	Flat	Flat with Rivets	Corrugated	Simple & Moderate Curves	Compound Curves	Flexible Substrates
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® QS2000 and QS3200 Printers	UV-cured, weather-resistant, excellent color retention, flexible and conformable. Available in standard CMYK colors plus Light Cyan, Light Magenta and White.	L	■	■	■	■	■	■
2600UVv2	3M™ Piezo Inkjet Ink Series 2600UVv2	3M™ Printer 2500UV	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 Printer	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.

† Maximum warranted durabilities vary based on base film, imaging method, and graphic protection 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.

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™ Rivet Brush Applicator RBA-1
Graphics are easier to install over rivets using this traditional applicator tool.

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™ 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™ 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.

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

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

WRC also coordinates outdoor weathering tests at 17 sites around the world. This large network of sites lets the 3M Graphics Market Center 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

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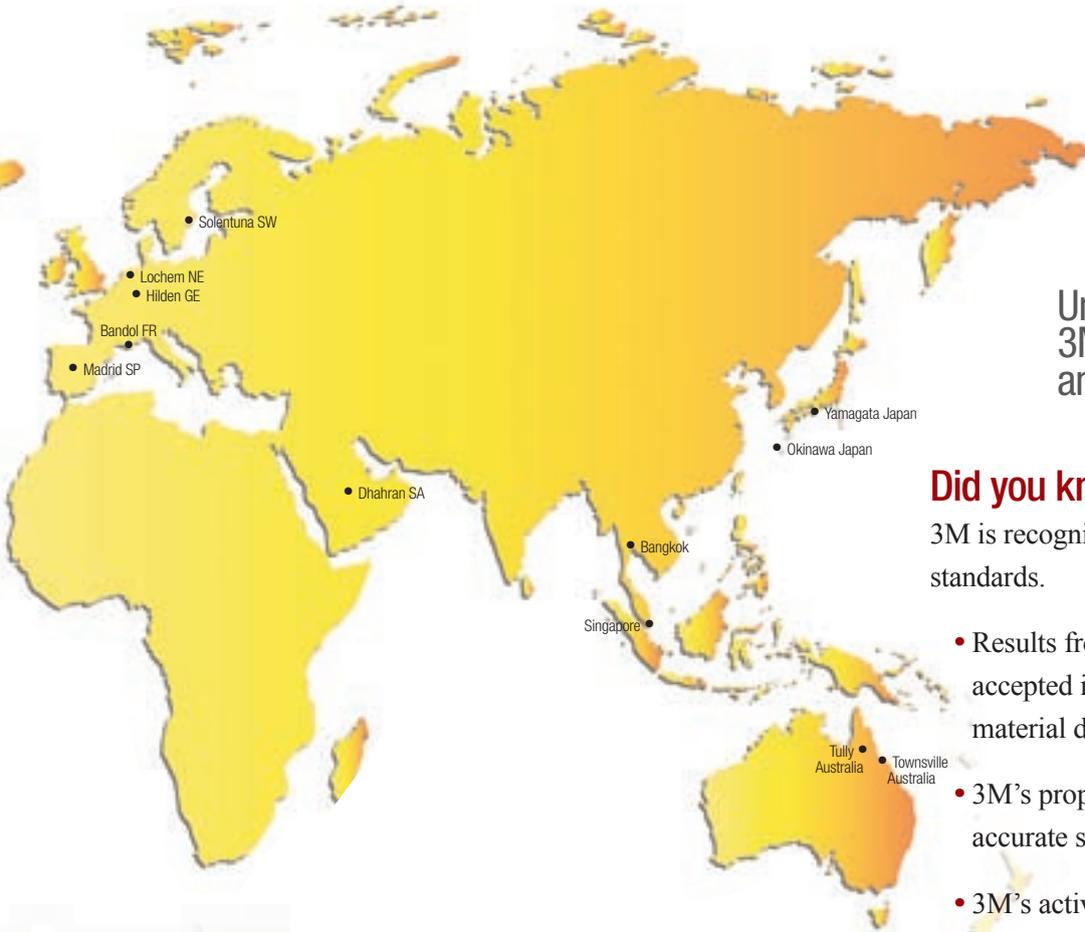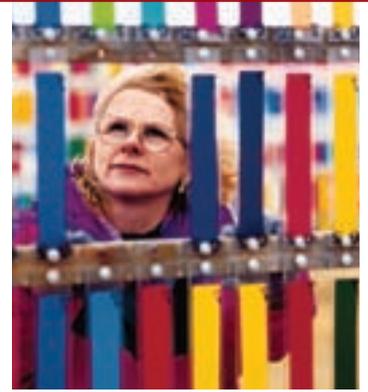
Unlike other manufacturers, 3M tests both finished graphics and individual components

Did you know?

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

- Results from many of 3M's outdoor test sites are accepted internationally as benchmarks for evaluating material durability.

- 3M's proprietary 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 most 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
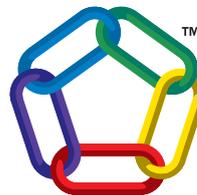
For Finished Graphics Using All 3M Components
3M™ MCS™ Warranty

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
• One day installation seminar held locally for your convenience
• Contact your local 3M Distributor for dates and details

3M World Headquarters Training Classes:
• Two day basic installation training course
• Three day advanced installation training course
• Call 1-800-328-3908 for details.

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 contact your 3M Distributor

Photo Captions

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:

Light Rail Train
3M™ Controltac™ Graphic Film with Comply™ Adhesive IJ180C-10 and 3M™ Scotchcal™ Luster Overlaminate 8519

Face First Sprinter Van
3M™ Controltac™ Wrap Film with Comply™ v3 Adhesive IJ380Cv3 and 3M™ Scotchcal™ Gloss Overlaminate 8580

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

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™ Scotchcal™ 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

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 piezo inkjet and 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 piezo 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 piezo 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 leaving little or no adhesive residue. Occasionally chemicals are also needed.
RG	Inkjet printable film prefix that indicates the film is reverse wound on a notched core.
Simple Curves	A surface with a double-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 piezo 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 Graphics Market Center 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 Durability 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. 3M, Controltac, Comply, MCS, Panagraphics, Scotchcal and Scotchlite are trademarks of 3M. NASCAR® and NASCAR Officially Licensed® are registered trademarks of the National Association of Stock Car Racing, Inc. Roush Fenway Racing Trademarks used by Authority of Roush Fenway, LLC. All other trademarks are property of their respective brands.