Graphic Idea Book
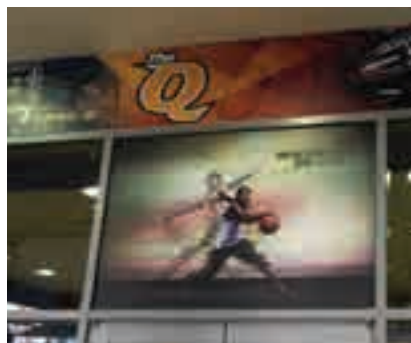
Creative: Chris Modarelli, Cleveland Browns Art Director
Printing: Consolidated Solutions
Installation: Side Effects

August 2015

mactac®
technology that sticks

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At Mactac®,
we view our brand through the eyes of our customers.

Mactac, means nothing without the creativity and drive you apply to turn Mactac into your finished product. Your graphics, and our brand live and breathe with every success you enjoy. We are proud to offer our innovation, created with your input and the broadest range of graphics media, laminates and mounting films available:

PERMACOLOR®

PermaGard®

The laminates that created an industry. High-performance, intermediate and economy choices including our revolutionary PERMACOLOR RAYZor™, PERMACOLOR Enhancers, PG8000 Series and innovative ColorGard™ LUV for UV inks.

PermaFlex®

High-performance rigid overlaminates for all of your trade show needs - including Lustex, the original luster finish.

PermaPrint®

Intermediate adhesives for both face and back mounting. Same quality standards as the rest of our PERMACOLOR line and a great value.

PermaTrans®

The industry standard for optically clear mounting adhesives.

THERMACOLOR®

A full range of thermal protection films for image protection and encapsulation.

IMAGin®

The complete product family of digital media for graphics production, including Mactac's patented B•free® air-egress technology.

REBEL®

Multi-print and screen print media for economy, intermediate and high-performance applications.

MACmark®

12 product lines ranging from economy to high-performance and specialty needs - over 250 color choices in high-performance intermediate, translucent, fluorescent, sparkle metallic, reflective, lustre and TuningFilms.

The **Idea Book** is a reference tool to guide users. The user is responsible for determining the product's suitability, including printability, adhesion and removal characteristics for the application. Please consult the Product Performance Guide at www.mactac.com/graphics for the latest, most up-to-date version. If there are any questions about applications and warranties, please contact your Mactac sales representative to discuss your requirements.

Open-Image Warranty™
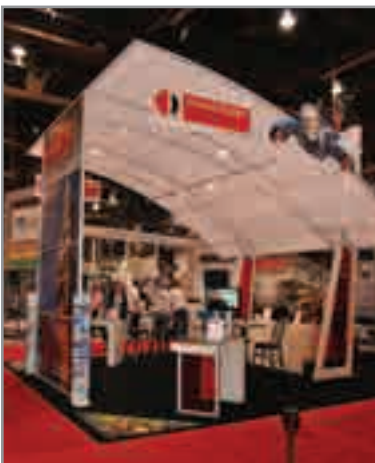
Open-Image Warranty is Mactac's way of keeping warranty matters simple. We understand you have many options available for making graphics for an ever-expanding variety of applications. When it comes to making graphics with Mactac's media, you are covered. You make the choice of printer, ink, and laminate or clear coat that are best for your business and Mactac® will be the partner who stands behind you. Yes, we are that confident in our products! Simply provide us with your choices and if we have already tested the combinations you have chosen, you're done. If not, give us a sample of your combination, we'll run a comprehensive series of tests to ensure the combination works and then warrant your application. If we find the combinations are not compatible we'll let you know that too and make alternate recommendations! It's that simple.

Mactac's Open-Image Warranty...
You choose the system, we provide the peace of mind.

What makes our warranty unique?

The Open-Image Warranty ties all general Mactac warranties together in a single system to ensure our customers are backed by the most flexible graphics warranty in the industry!

Mactac standard media warranties:

1) MACmark® cut vinyl films
2) IMAGin® digital media
3) PERMACOLOR® mounting and laminating films
4) REBEL® multi-print media

Mactac application specific warranties:

1) Floor Graphics
2) Vehicle Wraps

In addition, Mactac partners with most major printer and ink manufacturers to ensure product compatibility. We run meticulous testing on various combinations in order to offer this guarantee of compatibility and durability.

How to Get Help with your Open-Image Warranty questions...

1. Your District Sales Manager
2. Customer Service at 1-800-321-8834
3. Technical Marketing
4. www.Mactac.com/Graphics for:

   • Product Performance Guides

   • Technical Assistance Bulletins

   • ICC Profiles

   • Sales Literature

   • Distributor Information

   • Press Releases

   • Partnerships and warranties

   • What's new from Mactac

IMAGin® the possibilities.

IMAGin wide-format digital media offers material for all your application needs.

Available in widths from 30–64", matte and gloss finishes and permanent or removable adhesive, you can only **IMAGin** what Mactac® has to offer you. Our state-of-the-art manufacturing technology allows us to offer you high-performance acrylic adhesives that perform like no other and our vinyls offer the best printing surface on the market. Our primary digital coating line is fully automated, so no human hand touches your **IMAGin** product until you open the box.

IMAGin: Designed for wide-format printers

Features and Benefits:

- Full range of widths from 30-64"
- Large selection of 6" core products available
- Digital films compatible with a wide range of popular OEM and after-market inks, including latex
- OEM-tested and approved media including HP, VUTEK, Mimaki, Mutoh and many others.
- ICC profiles: More than 1,000 profiles available 24 hours a day, 7 days a week at http://www.mactac.eu/rub-icc-profiles-download-20.htm
- High-gloss finish and bright white face for more vibrant images and less ink consumption.
- Ease of application and sure bond adhesive systems.
- Open-Image Warranty™ system
- A variety of adhesive choices
- Patented B•free® air-egress on select products
- State-of-the-Art electronic inspection for inline manufacturing defect detection

Product Series	Description	Window	Indoor Floor	P.O.P./Indoor	Trade Show	Full & Partial Fleet Wraps	Full & Partial Vehicle Wraps
High-Performance: Ink Jet Media							
B•free® PRO - JT5529BFDPRO	2.1-mil gloss white highly conformable vinyl			✓		✓	✓
B•free GRUV™ - GV929BFD	2.1-mil gloss white highly conformable vinyl			✓		✓	✓
B•free GRUV- GV729BFD	2.7-mil gloss white high-performance vinyl			✓	✓	Partial	Partial
JT5728P	3.1-mil translucent vinyl	✓		✓	✓		
B•free JT5796MBF	3.1-mil frosted translucent vinyl	✓		✓	✓		
B•free JT5798MBF	3.1-mil dusted translucent vinyl	✓		✓	✓		
B•free JT5999MBF	3.1-mil gloss clear vinyl	✓		✓	✓		
REBEL® - RB528H	4.0-mil matte white vinyl			✓	✓		
REBEL - RB528P/529P*	4.0-mil matte/gloss white vinyl			✓	✓		
REBEL - RB528R/529R*	4.0-mil matte/gloss white vinyl		✓	✓	✓		
REBEL - RB599R	3.2-mil gloss clear vinyl	✓	✓	✓	✓		
REBEL - RB599H	3.2-mil gloss clear vinyl			✓	✓		
REBEL - RB428P/429P*	4.0-mil matte/gloss white vinyl			✓	✓		
REBEL - RB228P/228R	3.4-mil mattewhite vinyl			✓	✓		
Intermediate: Ink Jet Media							
JT5829P/5828P	3.7-mil gloss/matte white intermediate vinyl			✓	✓		
JT5829R/5828R	3.7-mil gloss/matte white intermediate vinyl	✓		✓	✓		
JT5826P	2.8-mil matte white banner vinyl			Banner			
JT5828HTO	3.7-mil matte white intermediate vinyl		Carpet	✓	✓		
B•free GRUV - GV428BFD/429BFD	3.0-mil matte/gloss white intermediate vinyl			✓	✓		
B•free GRUV - GV429R	3.0-mil gloss white intermediate vinyl			✓	✓		
B•free GRUV - GV529BFD	3.0-mil gloss white intermediate vinyl			✓	✓		
EMP328/329	3.2-mil matte/gloss vinyl			✓	✓		
EMR328/329	3.2-mil matte/gloss vinyl		✓	✓	✓		
JT828P/829P	3.1-mil matte/gloss white economical vinyl			✓	✓		
IMAGin® Verde™ - VM3209R	2.0-mil gloss clear topcoated polyester, PVC-free	✓		✓	✓		
Specialty: Ink Jet Media							
StreetRap™ STR328	3.2-mil matte white vinyl			✓	✓		
wallNOODLE® WN628	6.0-mil matte white semi-rigid vinyl	✓		✓	✓		
wallNOODLE Permanent	6.0-mil matte white semi-rigid vinyl			✓	✓		
IMAGin ROODLE™ RO628	6.0-mil matte white semi-rigid vinyl	✓		✓	✓		
IMAGin DecoFresco	8.0-mil textured vinyl	✓		✓	✓		
IMAGin DecoMural	Non-woven textured vinyl	✓		✓	✓		
RoughRap™ WW100	2.1-mil gloss white highly conformable vinyl				✓		
IMAGin digiTrans™ JDT429	4.0-mil gloss white transit vinyl				✓	Partial Decals	Partial Decals
WV159 - Window Perf	8.0-mil white perforated vinyl 50 percent perforated	✓					Window
WV139 - Window Perf	6.0-mil white perforated vinyl 30 percent perforated	✓					Window
WP129 - Window Perf	6.0-mil white perforated vinyl 40 percent perforated	✓					Window

Multi-Print Media

Visit www.Mactac.com/Graphics for the most up-to-date product literature and technical assistance guides.

Boats	Billboard	Museum	Light Box	Bus	Unsealed Concrete	Walls	Adhesive Liner / Durability	PERMACOLOR RAYZor™ LF3600 Series	PERMACOLOR Enhancers 6300 Series	PermaFlex™ IP6200 Series PF6300, PF6400 & PF6500 Series	PermaGard™ Series	PERMACOLOR LUV™ Series	PERMACOLOR PromoGard™
✓		✓		✓		✓	Repositionable bubble-free, opaque acrylic 80# PCK / 8 - 10 years	✓	✓				
				✓		✓	Bubble-free, opaque acrylic 80# PCK / 8 - 10 years	✓	✓				
	✓	✓		✓		✓	Bubble-free, opaque acrylic 80# PCK / 5 - 7 years	✓	✓				
			✓				Permanent, clear acrylic 86# Kraft / 5 - 7 years						
			✓				Bubble-free, clear acrylic 80# PCK / 5 - 7 years						
			✓				Bubble-free, clear acrylic 80# PCK / 5 - 7 years						
		✓	✓				Bubble-free, clear acrylic 80# PCK / 5 - 7 years	✓					
	✓					✓	Permanent high-tack, clear acrylic 90# Polycoated Superflat / 5 years					✓	
	✓	✓					Permanent, clear acrylic 90# Polycoated Superflat / 5 years	✓				✓	
	✓	✓					Removable, clear acrylic 90# Polycoated Superflat / 5 years	✓		✓		✓	
	✓		✓				Removable, clear acrylic 90# PCK / 5 years	✓					
	✓						High-Tack, clear acrylic 90# PCK / 5 years	✓					
	✓						Permanent, clear acrylic 90# Polycoated Superflat™ / 5 years					✓	✓
	✓						Permanent/Removabl, clear acrylic 90# Polycoated lay flat / 2 years					✓	✓
	✓	✓				✓	Permanent, opaque acrylic 86# Kraft / 4 years		✓	✓	✓	✓	✓
	✓	✓		✓			Removable, opaque acrylic 86# Kraft / 4 years		✓	✓		✓	✓
							Special permanent, clear acrylic 86# Kraft / 3 years	✓					
	✓						High-tack permanent, opaque acrylic 86# Kraft / 3 years	✓	✓			✓	✓
		✓					Permanent Bubble-free, opaque acrylic 86# Kraft / 3 years					✓	✓
	✓					✓	Removable Bubble-free, opaque acrylic 98# PCK / 5 years	✓	✓			✓	✓
	✓					✓	Aggressive Bubble-free, opaque acrylic 98# PCK / 5 years	✓	✓			✓	✓
	✓						Permanent, opaque acrylic 72# PCK / 4 years					✓	
	✓						Removable, opaque acrylic 72# PCK / 4 years			✓		✓	✓
	✓						Permanent, clear acrylic 74# Kraft / 4 years					✓	✓
		✓					Permanent, clear acrylic 1.4-mil Clear Polyester / 2 years						
					✓	Outdoor	Aggressive high-tack, clear acrylic 96# PCK / 6 months			Floor		✓	
		✓				✓	Removable, repositionable micro-sphere 90# PE Coated Kraft / 6 months - 1year						
		✓				✓	Permanent micro-sphere 90# PE Coated Kraft / 6 months - 1year					✓	
		✓				✓	Removable, repositionable 90# PCK / 1 year					✓	
		✓				✓	Clear, removable acrylic 90# Polycoated / 2-3 years						
		✓				✓	Clear, permanent acrylic 74# Polycoated liner/ 5-7 years						
		✓		✓		✓	Permanent, opaque acrylic 80# PCK / 18 months	✓					
✓				✓		✓	Semi-permanent, black opaque acrylic 74# Kraft / 3 years					✓	
							Semi-permanent, clear acrylic 7.0-mil film / 3 years	✓					
							Semi-permanent, clear acrylic 6.0-mil Paper / 2 year	✓					
							Semi-permanent, clear acrylic 86# White Kraft / 1 year	✓					

High-Performance | Solvent-based, UV Cured Ink Jet Media

B•free®
BUBBLE FREE DIGITAL MEDIA

10 yr | **HIGH GLOSS finish** | **air egress** | **Permanent**

Application: Vehicle Wrap
Material: IMAGin® B•free® PRO

JT5529BFD PRO **is a 2.1-mil soft white gloss, highly conformable, high-performance PVC film designed for solvent- and latex ink jet printing**. Coated on one side with an aggressive permanent, opaque, acrylic pressure-sensitive adhesive with air-egress technology and supplied with an 80# poly-coated liner. It is designed with a more robust initial adhesion which makes it ideal for installers accustomed to quick-bonding media.

Features and Benefits:
- 10 Year outdoor durability
- Air-egress for bubble-free applications
- Permanent, opaque, solvent-based acrylic adhesive
- Higher initial adhesion
- Superior print quality for vibrant images
- Screen printable with lay-flat liner

Typical Uses:
- Fleet graphics
- Marine graphics
- Bus and automotive wraps
- Long-term outdoor signage

Use with:
- PERMACOLOR® RAYZor™ - page 30
- PERMACOLOR Enhancers - page 31
- IMAGin® WindowView WV159 or WP129 - pgs 21-22

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	- 15 min	**2.3**
	- 30 min	**2.5**
	- 24 hr	**2.70**
Quick Tack on Glass, lb./in2		**4.0 ± 0.7**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.5**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-58° to 194°F** (-50° to 90°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JX5529PRO164	54" x 164'	42

B•free® Gruv™

B•free® Gruv™ GV929BFD is a 2.1-mil gloss white, soft calendered PVC film designed for ink jet printing. The product is coated on one side with a quick-building, permanent, opaque, acrylic pressure-sensitive adhesive with air-egress technology and supplied with a 98# polycoated liner. GV929BFD is designed for long-term outdoor, vehicle markings on flat, curved, complex and riveted surfaces.

9 yr | **GLOSS finish** | **air egress** | **Permanent**

Features and Benefits:
- Nine year outdoor durability
- Air-egress allows for bubble-free applications
- Permanent, opaque, solvent-based acrylic adhesive
- Superior print quality for vibrant images
- Screen printable with lay-flat liner

Typical Uses:
- Vehicle wraps
- Long-term indoor and outdoor signage

Use with:
- PERMACOLOR RAYZor - page 30
- PERMACOLOR Enhancers - page 31

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	- 15 min	**2.9**
	- 30 min	**4.1**
	- 24 hr	**4.7**
Quick Tack on Glass, lb./in2		**4.6**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.4**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-4° to 160°F** (-20° to 70°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
GV929BFDW54	54" x 150'	40

B•free® Gruv™ GV729BFD is a 3.0-mil gloss white, soft calendered PVC film designed for ink jet printing.

The product is coated on one side with a quick-building, permanent, opaque, acrylic pressure-sensitive adhesive with air-egress technology and supplied with a 98# polycoated liner. GV729BFD is designed for medium-term outdoor advertising and promotion applications on flat or simple-curved surfaces. Use of PERMACOLOR® RAYZor™ overlaminates will extend the life of the graphic.

Features and Benefits:
- Seven year outdoor durability
- Air-egress adhesive for fast bubble-free application

Typical Uses:
- Long-term indoor & outdoor signage
- Partial vehicle wraps

Use with:
- PERMACOLOR RAYZor - page 30

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	- 15 min	**2.9**
	- 30 min	**2.9**
	- 24 hr	**4.7**
Quick Tack on Glass, lb./in2		**4.6**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.4**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-4° to 160°F**
		(-20° to 70°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
GV729BFDW54	54" x 150'	40

JT5728P is a 3.1-mil translucent, matte white, soft, polymeric plasticized, calendered PVC film designed for solvent-based ink jet printing.

The product is coated on one side with a permanent, clear, acrylic pressure-sensitive adhesive and is supplied with an 86# Kraft liner. JT5728P is designed for internally illuminated signs (light boxes).

Features and Benefits:
- Seven year outdoor durability
- Permanent, solvent-based acrylic adhesive
- Matte white finish provides excellent ink anchorage.

Typical Uses:
- Light boxes

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	- 24 hr	**4.1-5.9**
Quick Tack on Glass, lb./in2		**4.3-6.2**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.2**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-40° to 194°F**
		(-40° to 90°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JX5728P	54" x 164'	47

Application: Light Box Graphics
Material: IMAGin® JT5728P

IMAGin® by MACtac®

High-Performance | Solvent-based, UV Cured Ink Jet Media

B•free®
BUBBLE FREE DIGITAL MEDIA
WINDOW FILMS

5 yr | MATTE finish | air egress | Permanent

Application: Window Graphics
Material:B•free® Frosted Window Film

JT5796MBF - Frosted is a 3.1-mil translucent, matte frosted, polymeric PVC film designed for solvent-based ink jet printing.
The product is coated on one side with a micro-structured, repositionable, permanent, clear acrylic adhesive and is supplied with an 80# Polycoated, layflat liner. The micro-structured adhesive allows for the increased speed of dry application on windows with no air bubbles or wrinkling. It also eliminates the messy clean up of wet-application fluids.

Features and Benefits:
- Frosted translucent facestock for etched glass look
- Micro-structured adhesive for dry applications on windows
- Reverse printable to be read through glass

Typical Uses:
- Window graphics
- Light boxes
- Use MACmark® 700 Series if application is unprinted décor

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Glass - 24 hours	**3.1-3.7**
Quick Tack on Glass, lb./in2	**4.4-5.6**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.2**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-40° to 194°F** (-40° to 90°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
JJ5796MBF	54" x 82'	24
JX5796MBF	54" x 164'	47

B•free®
BUBBLE FREE DIGITAL MEDIA
WINDOW FILMS

5 yr | MATTE finish | air egress | Permanent

Application: Window Graphics
Material: B•free Dusted Window Film

JT5798MBF - Dusted is a 3.1-mil translucent, matte, dusted, polymeric PVC film designed for solvent-based ink jet printing.
The product is coated on one side with a micro-structured, repositionable, permanent, clear acrylic adhesive and is supplied with an 80# Polycoated, layflat liner. The micro-structured adhesive allows for the increased speed of dry application on windows with no air bubbles or wrinkling. It also eliminates the messy clean up of wet-application fluids.

Features and Benefits:
- Dusted translucent facestock for etched glass look
- Micro-structured adhesive for dry applications on windows
- Reverse printable to be read through glass

Typical Uses:
- Window graphics
- Light boxes
- Use MACmark 700 Series if application is unprinted décor

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Glass – 24 hr	**3.1-3.7**
Quick Tack on Glass, lb./in2	**4.4-5.6**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.2**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-40° to 194°F** (-40° to 90°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
JJ5798MBF	54" x 82'	24
JX5798MBF	54" x 164'	47

IMAGin®
by MACtac®

JT5999MBF - Clear is a 3.1-mil gloss, clear polymeric PVC film designed for solvent-based ink jet printing.

The product is coated on one side with a micro-structured, repositionable, permanent, clear acrylic adhesive and is supplied with an 80# polycoated, layflat liner. The micro-structured adhesive allows for the increased speed of dry application on windows with no air bubbles or wrinkling. It also eliminates the messy clean up of wet-application fluids.

Features and Benefits:
- Gloss clear facestock
- Microstructured adhesive for dry applications on windows
- Reverse printable to be read through glass

Typical Uses:
- Window graphics

Tip:
- Not recommended for signs which will be handled extensively. Use IMAGin® Verde™ VM3209R, IMAGin JT5999R or REBEL® RB599R for best results

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Glass – 24 hr	**3.1-3.7**
Quick Tack on Glass, lb./in2	**4.4-5.6**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.2**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-40° to 194°F** (-40° to 90°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
JJ5999MBF	54" x 82'	24
JX5999MBF	54" x 164'	47

B•free®
BUBBLE FREE DIGITAL MEDIA
WINDOW FILMS

5yr | GLOSS finish | air egress | Permanent

Application: Window Graphics
Material: B•free® Clear Window Film

JT5999R is a 3.1-mil soft clear gloss, polymeric stabilized PVC film designed for solvent-based, ink jet printing.

The product is coated on one side with clear removable, acrylic pressure-sensitive adhesive and supplied with an 86# Kraft liner. JT5999R is designed for long-term outdoor advertising and promotional markings on flat or slightly curved surfaces.

Features and Benefits:
- Five year outdoor durability
- Glossy, clear polymeric vinyl
- Removable, clear solvent-based acrylic adhesive for ease of use.
- Cleanly removable for up to two years after application on most substrates.

Typical Uses:
- Window graphics
- Floor graphics

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Glass – 24 hr	**0.45-1.4**
Quick Tack on Glass, lb./in2	**0.9-1.8**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.5**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-40° to 158°F** (-40° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
JX5999R	54" x 164'	47

5yr | GLOSS finish | FLAT surface | Removable

Application: Window Graphics
Material: IMAGin JT5999R

IMAGin®
by MACtac®

Intermediate | Solvent-based, UV Cured Ink Jet Media

4yr | MATTE finish | GLOSS finish | FLAT surface

Application: Outdoor Signage
Material: IMAGin JT5828P

JT5828P 3.7-mil matte white & JT5829P 3.7-mil gloss white are soft calendered PVC films designed for solvent-based ink jet printing. These products are coated on one side with permanent, opaque, acrylic pressure-sensitive adhesive and supplied with an 86# Kraft liner. JT5828P/JT5829P are designed for medium-term, indoor and outdoor advertising and promotion on flat or slightly curved surfaces.

Features and Benefits:
- 3.7-mil matte/gloss white vinyl
- Four year outdoor durability
- Permanent, opaque, solvent-based acrylic adhesive
- Bright white face offers truer vibrant colors

Typical Uses:

- Medium-term outdoor signage
- Arena graphics & transit applications

Use with:
- PERMACOLOR® Enhancers - page 31
- ColorGard™ LUV™ Series - page 33

Physical Properties	JT5828P Typical Values	JT582P Typical Values
Peel Adhesion, lb./in. 180° on Glass – 24 hr	**3.4-5.7**	**3.7-6.0**
Quick Tack on Glass, lb./in2	**2.5-3.9**	**2.8-3.9**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 1.0**	
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-5° to 158°F** (-20° to 70°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JX5828P	54" x 164'	47
JX5829P	54" x 164'	47

4yr | MATTE finish | GLOSS finish | FLAT surface

Application: Indoor Advertising
Material:IMAGin 5828R

Application: Floor Graphic
Material: IMAGin® JT5829R

JT5828R 3.7-mil matte white & JT5829R 3.7-mil soft white gloss are soft calendered PVC films designed for solvent-based ink jet printing. These products are coated on one side with removable, opaque, acrylic pressure-sensitive adhesive and supplied with an 86# Kraft liner. JT5828R/JT5829R are designed for medium-term, indoor or outdoor advertising and promotions on flat or slightly curved surfaces.

Features and Benefits:
- 3.7-mil soft white matte/gloss vinyl
- Four year outdoor durability
- Removable, opaque, solvent-based acrylic adhesive for ease of application
- Bright white face offers truer vibrant colors

Typical Uses:
- Billboards & Decals
- Medium-term outdoor signage
- Floor graphics
- Transit graphics

Use with:
- PermaFlex® IP6200 & PF6300^ – page 26-27
- PERMACOLOR Enhancers - page 31
- ColorGard LUV Series - page 33

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel – 24 hr	**0.6-1.6**
Quick Tack on SS, lb./in2	**0.5-1.3**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.5**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-40° to 158°F** (-40° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
JX5828R	54" x 164'	47
JX5829R	54" x 164'	47

^ Meets OSHA Standards for slip resistance, recommended for dry floors, wet surfaces & handicap accessible routes. See Performance Guides for more information.

IMAGin®
by MACtac®

JT5826P

JT5826P is a 2.8-mil matte white, very soft vinyl film designed for solvent-based, ink jet printing. The product is coated on one side with a permanent, clear, acrylic pressure-sensitive adhesive and supplied with an 86# Kraft liner. JT5826P is designed for indoor and outdoor applications such as plasticized banners and padded dasherboards, at baseball stadiums and warning tracks.

Features and Benefits:
- 2.8-mil matte white vinyl
- Four year outdoor durability
- Permanent, clear, solvent-based acrylic adhesive
- Special formulation specifically for plasticized banners

Typical Uses:
- Vinyl designed for applications to plasticized banners

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Glass	- 24 hr	**2.6-4.5**
Quick Tack on Glass, lb./in2		**3.2-5.0**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 0.5**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-5° to 158°F** (-20° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JX5826P	54" x 164'	47

4yr | MATTE finish | FLAT surface | Permanent

JT5828HTO

JT5828HTO is a 3.7-mil matte white, soft calendered PVC film designed for solvent-based ink jet printing. This product is coated on one side with high-tack, permanent, opaque, solvent-based acrylic pressure-sensitive adhesive and supplied with an 86# Kraft liner. JT5828HTO is designed for carpet graphics; medium-term, indoor or outdoor advertising; tri-vision or flat billboards; promotion on flat or slightly curved surfaces; and hard to stick to materials like polyethylene and dasher boards.

Features and Benefits:
- 3.7-mil matte white vinyl
- Four year outdoor durability
- Special high-tack, opaque, solvent-based adhesive for difficult applications.
- Brilliant white face for truer, brighter colors.

Typical Uses:
- Carpet graphics
- Tri-vision billboards
- Medium-term outdoor advertising
- Low surface energy substrates

Use with:
- PermaFlex® IP6200 & PF6300^ - page 26-27
- ColorGard™ LUV Series - page 33

^ **Meets OSHA Standards for slip resistance, recommended for dry floors, wet surfaces & handicap accessible routes. See Performance Guides for more information.**

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Glass	- 30 min. - 24 hr	**5.5-7.0** **6.5-7.5**
Quick Tack on Glass, lb./in2		**4.0-5.7**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 1.5**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-5° to 158°F** (-20° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JX5828HTO	54" x 164'	47

4yr | MATTE finish | FLAT surface | ULTRA Permanent

Application: Carpet Graphic
Material: IMAGin® JT5828HTO

IMAGin®
by MACtac®

Customer Service **800-321-8834** | Inside Sales **866-622-8223** | Mactac.com/Graphics
@Mactac_Graphics | Mactac.NAmerica

Intermediate | Solvent-based, UV Cured Ink Jet Media

B•free® Gruv™ GV429R is a 3.0-mil gloss white vinyl removable air-egress media for solvent, eco-solvent, and UV wide-format printing, as well as screen printing. Coated on one side with a removable opaque adhesive and supplied with an 98# moisture-stable polycoated paper liner, GV429R is ideal for wall graphics, indoor and outdoor signage, and point of purchase applications

Application: P.O.P & Store Displays
Material: B•free Gruv

Features and Benefits:
• 3.0-mil gloss white PVC
• B•free® air-egress for easy installation
• Bright white face for excellent color fidelity
• Up to one year removability and 4 year unprinted outdoor life.

Typical Uses:
• Wall Graphics
• Indoor and Outdoor Signage
• Displays, Tradeshow, POP

Use with:
• PERMACOLOR® RAYZor™ – page 30
• ColorGard™ LUV Series – page 33

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	– 24 hr	**1.6**
180° on Stainless Steel	– 24 hr	**1.2**
Quick Tack		
on Glass, lb./in2		**1.0**
on Stainless Steel, lb./in2		**0.9**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.5**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-40° to 158°F** (-40° to 70°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
GV429RW54L150	54" x 150'	40

B•free® Gruv™ GV428P/429P is a 4.0-mil matte/gloss white, soft calendared PVC film designed for solvent and UV inkjet printing. The product is coated on one side with a permanent, opaque, acrylic pressure-sensitive adhesive with air-egress technology and supplied with a 98# polycoated liner, GV428P/429P is ideal for wall graphics, indoor and outdoor signage, and point of purchase applications

NEW!

Features and Benefits:
• 4.0-mil gloss white PVC
• B•free® air-egress for easy installation
• Bright white face for excellent color fidelity
• Up to one year removability and 4 year unprinted outdoor life.

Typical Uses:
• Wall Graphics
• Indoor and Outdoor Signage
• Displays, Tradeshow, POP

Use with:
• PERMACOLOR RAYZor – page 30
• ColorGard LUV Series – page 33
• PERMACOLOR PromoGard – page 34

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Stainless Steel	– 30 min.	**4.6**
	– 24 hr	**5.0**
Quick Tack		
on Stainless Steel, lb./in2		**3.5**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 1.0**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**-40° to 158°F** (-40° to 70°C)
Shelf Life:		
Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
GV428PW54L150 – matte	54" x 150'	40
GV429PW54L150 – gloss	54" x 150'	40

IMAGin®
by MACtac®

B•free Gruv GV529BFD **is a 3.0-mil gloss white, soft calendered PVC film designed for ink jet printing**. The product is coated on one side with a quick-building, permanent, opaque, acrylic pressure-sensitive adhesive with air-egress technology and supplied with a 98# polycoated liner. GV529BFD is designed for indoor or medium-term outdoor advertising and promotion applications on flat or simple curved surfaces.

B•free Gruv™

Features and Benefits:
- 3.0-mil gloss white PVC
- Eco-solvent, solvent -based and UV-cured ink jet printing
- Air-egress adhesive for faster application times
- Five year outdoor durability

Typical Uses:
- Flat or simple curved surfaces
- Indoor and outdoor signage
- Displays, tradeshows and P.O.P.

Use with:
- PERMACOLOR® RAYZor™ – page 30
- ColorGard™ LUV Series – page 33

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	- 30 min. - 24 hr	**2.9** **4.0**
Quick Tack on SS, lb./in2		**4.6**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 0.8**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-40° to 180°F** (-40° to 82°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
GV529BFDW54	54" x 150'	40

5yr **GLOSS finish** **air egress** **Permanent**

Application: Tradeshow Display
Material: B•free Gruv

IMAGin® Verde VM3209R **is a 2.0-mil gloss clear scratch-resistant polyester designed for UV cured wide-format digital printing**. 100% chlorine, phthalate, and vinyl-free, VM3209R is the right product for customers seeking more environmentally friendly products and superior graphics reproduction. VM3209R is supplied with an optically clear removable adhesive and a glass-smooth polyester release liner for indoor and outdoor signage on glass and other flat and slightly curved surfaces.

IMAGin®
by MACtac®
V·E·R·D·E

Features and Benefits:
- 100% chlorine, phthalate and vinyl-free
- Topcoated especially for wide-format UV
- Scratch resistant
- Optically clear
- REACH compliant

Typical Uses:
- Indoor and outdoor window signage
- Point of purchase displays
- Flat and slightly curved surfaces

Physical Properties		Typical Values
Thickness, inches (µm) Film		**2.0-mils**
Peel Adhesion, lb./in. 180° on Glass	- 24 hr	**≤0.7**
Temperature Ranges Minimum Application: End Use:		**40°F** (+5°C) **-40° to 212°F** (-40° to 100°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
VM3209W60L164	60" x 164'	52

2yr **GLOSS finish** **Vinyl Free** **Removable**

Application: Display
Material: IMAGin Verde

M Series
DIGITAL MEDIA

4yr | MATTE finish | GLOSS finish | Permanent

Application: Long-term indoor signage
Material: M Series

EMP328/EMP329 are 3.2-mil matte/gloss white, soft calendered PVC films designed for solvent-based ink jet printing. These products are coated on one side with a **permanent**, opaque, acrylic pressure-sensitive adhesive and supplied with a 72# polycoated layflat liner. EMP328/EMP329 are designed for indoor or medium-term outdoor advertising and promotion on flat surfaces.

Features and Benefits:
- 3.2-mil matte white vinyl - EMP328
  3.2-mil gloss white vinyl - EMP329
- Permanent, opaque acrylic adhesive
- 72# Polycoated layflat liner
- Four year outdoor durability

Typical Uses:
- Long-term indoor signage
- Billboards, intermediate-term outdoor graphics
- Decals

Use with:
- ColorGard™ LUV series page 33

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	- 30 min. - 24 hr	**4.5** **6.0**
Quick Tack on SS, lb./in2		**4.0**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 1.0**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-40° to 180°F** (-40° to 82°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No. EMP328	Stock No. EMP329	Roll Width x Length	Weight: Pounds
EMP328W30*	EMP329W30*	30" x 150'	17
EMP328W54	EMP329W54	54" x 150'	33
EMP328W60	EMP329W60	60" x 150'	37

* 2 Roll Minimum

M Series
DIGITAL MEDIA

4yr | MATTE finish | GLOSS finish | Removable

Application: Medium-term signage
Material: M Series

EMR328/EMR329 are 3.2-mil matte/gloss white, soft calendered PVC films designed for solvent-based ink jet printing. These products are coated on one side with a **removable**, opaque, acrylic pressure-sensitive adhesive and supplied with a 72# polycoated layflat liner. EMR328/EMR329 are designed for indoor or medium-term outdoor advertising and promotion on flat surfaces.

Features and Benefits:
- 3.2-mil matte white vinyl - EMR328
  3.2-mil gloss white vinyl - EMR329
- Removable, opaque acrylic adhesive
- 72# Polycoated layflat liner
- Four year outdoor durability

Typical Uses:
- Medium-term indoor signage
- Decals
- Floor Graphics

Use with:
- PERMACOLOR® PermaFlex® IP6200 & PF6300^ pgs 26-27
- PERMACOLOR Enhancers - page 31
- ColorGard LUV series page 33

^ Meets OSHA Standards for slip resistance, recommended for dry floors, wet surfaces & handicap accessible routes. See Performance Guides for more information.

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	- 30 min. - 24 hr	**1.5** **2.5**
Quick Tack on SS, lb./in2		**1.8**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 1.0**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-40° to 180°F** (-40° to 82°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No. EMR328	Stock No. EMR329	Roll Width x Length	Weight: Pounds
EMR328W30*	EMR329W30*	30" x 150'	17
EMR328W54	EMR329W54	54" x 150'	33
EMR328W60	EMR329W60	60" x 150'	37

* 2 Roll Minimum

IMAGin® *by MACtac®*

IMAGin® *by MACtac®*
PrintVinyl

JT828P/JT829P are 3.9-mil matte/gloss white, soft-calendered PVC films designed for solvent-based and latex ink jet printing. These products are coated on one side with a clear **permanent**, acrylic pressure-sensitive adhesive and supplied with a 74# Kraft liner. JT828P/JT829P are designed for general purpose indoor and outdoor advertising and promotion on flat or slightly curved surfaces.

4 yr | **MATTE finish** | **GLOSS finish** | **FLAT surface**

Features and Benefits:
- 3.1-mil matte white vinyl film – JT828P
  3.1-mil gloss white vinyl film - JT829P
- Up to four year outdoor durability
- Permanent, clear, acrylic adhesive

Typical Uses:
- General purpose indoor signage
- Outdoor advertising and promotion on flat or slightly curved surfaces

Use with:
- ColorGard™ LUV Series - page 33
- PERMACOLOR® PromoGard® PG7000 Series Laminates - page 34

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Glass	- 24 hr	**3.4-5.2**
Quick Tack on SS, lb./in2		**2.5-3.9**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 1.0**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-5° to 158°F** (-20° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No. JT828P	Stock No. JT829P	Roll Width x Length	Weight: Pounds
JT828PW30L150*	JT829PW30L150*	30" x 150'	25
JT828PW54L150	JT829PW54L150	54" x 150'	47
JT828PW64L150	JT829PW64L150	64" x 150'	50

* 2 Roll Minimum

Application: Outdoor Signage
Material: IMAGin® JT829P

StreetRap™
CONCRETE FLOOR GRAPHICS

IMAGin® StreetRap™ is a 3.4-mil matte white vinyl with an aggressive high-tack adhesive and 90# SuperFlat™ Liner. It's designed for short-term application to unsealed, indoor or outdoor, pedestrian concrete or asphalt surfaces or selected smooth to slightly rough wall surfaces.

6 month | **MATTE finish** | **FLOOR graphics** | **Permanent**

Features and Benefits:
- Great adhesion to unsealed concrete or asphalt surfaces
- Eco-solvent, solvent, UV ink jet, latex and screen printable
- Matte facestock provides superior printability

Typical Uses:
- Retail outlets
- Trade shows
- Sports venues
- Convention Centers

Use with:
- PERMACOLOR® PermaFlex® PF6300^
 - page 27

^ Meets OSHA Standards for slip resistance, recommended for dry floors, wet surfaces & handicap accessible routes. See Performance Guides for more information.

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	- 30 min - 24 hr	**7.0** **8.0**
Quick Tack on SS, lb./in2		**7.5**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 0.05**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-50° to 225°F** (-45° to 107°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
STR328W54	54" x 150'	45
STR328L100	54" x 100'	40

Application: Concrete Graphic
Material:StreetRap

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Customer Service **800-321-8834** | Inside Sales **866-622-8223** | Mactac.com/Graphics
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Specialty | Solvent-based, UV Cured Ink Jet Media

IMAGin® RoughRAP™ is a 2.1-mil soft white gloss, highly conformable PVC film designed for solvent-based ink jet printing.

The product is coated on one side with a high-tack, permanent, opaque acrylic adhesive. RoughRAP is specifically designed for direct application onto exterior and interior brick walls for a painted on look. Use of an overlaminate will extend the life of the graphic and allow for easier handling during installation.

18 month | **HIGH GLOSS finish** | **TEXTURED finish** | **Permanent**

Application: Wall Graphics
Material: RoughRAP™

Features and Benefits:
- 2.1-mil highly conformable vinyl face
- High-tack, permanent adhesive
- 80# polycoated liner for excellent printability and layflat
- Superior print quality for vibrant images

Typical Uses:
- Exterior and interior brick walls

Use with:
- PERMACOLOR® RAYZor™ - page 30

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel – 24 hr	**3.2-5.0**
Quick Tack on SS, lb./in2	**4.8-6.2**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.5**
Temperature Ranges Minimum Application: End Use:	**50°F** (+10°C) **-4° to 160°F** (-20° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
WW100	54" x 82'	24
WW100W54L150	54" x 150'	40

IMAGin ROODLE™ RO628 is a 6.0-mil matte white vinyl designed for solvent, eco-solvent, latex, and UV wide-format, as well as for screen printing.

Designed for tileable wall graphics, posters, decals and bumper stickers, RO628 is supplied on a 90# SuperFlat™ polycoated release liner for moisture stability regardless of print method.

3 yr | **MATTE finish** | **FLAT surface** | **Removable**

Application: Wall Graphics
Material: ROODLE

Features and Benefits:
- ROODLE meets the flame spread and smoke density specifications for ANSI/NFPA – Class A and IBC – Class A.
- Thick face makes ROODLE easy to install, even without a laminate
- Removable for up to two years from most well maintained substrates

Typical Uses:
- Wall murals
- Decals
- Point of purchase displays

Use with:
- PERMACOLOR® LUV Series - page 33
- PERMACOLOR PromoGard PG7000 Series - page 34

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel – 24 hr		**2.1**
Quick Tack on SS, lb./in2		**2.1**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	MD CD	**0.40** **0.20**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **-40° to 180°F** (-40° to 82°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
RO628W54L100	54" x 100'	45
RO628W60L100	60" x 100'	50

IMAGin®
by MACtac®

Permanent wallNOODLE® is a 6.0-mil matte white vinyl designed for solvent, UV and latex wide-format printing, as well as screen and offset printing. Permanent NOODLE is ideal for indoor and outdoor wall graphics, decals, signage, and barriers. Three year unprinted outdoor durability.

wallNOODLE®
PERMANENT MEDIA

3yr | MATTE finish | FLAT surface | Permanent

Features and Benefits:
- 6.0-mil matte white semi-rigid facestock
- Thick face is easy to install, even without a laminate
- Designed for smooth, flat surfaces
- Meets the flame spread and smoke density specifications for ANSI/NFPA – Class A and IBC – Class A

Typical Uses:
- Wall graphics
- Signage
- Decals
- Barrier graphics

Use with:
- ColorGard™ LUV Series - page 33
- PERMACOLOR® PromoGard® PG7000 - pg 34, if desired.

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	– 24 hr	**5.3**
Quick Tack on SS, lb./in2		**2.3**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	MD CD	**0.20** **0.10**
Temperature Ranges Minimum Application: End Use:		**–40°F** (-40°C) **–40° to 180°F** (-40° to 82°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
PN628W54L100	54" x 100'	45

wallNOODLE® is a 6.0-mil matte white, semi-rigid calendered PVC film designed for UV screen, and solvent-based ink jet printing. The product is coated on one side with a removable and repositionable acrylic pressure-sensitive adhesive and supplied with a 90# SuperFlat™ liner. wallNOODLE is designed for short-term (6 months to one year) indoor wall graphics on smooth, flat surfaces.

wallNOODLE®
SHORT TERM WALL MEDIA

1yr | MATTE finish | FLAT surface | Removable

Features and Benefits:
- 6.0-mil matte white semi-rigid facestock
- Easily applied and removed from most interior wall surfaces
- Reusable
- Matte facestock provides superior printability
- Available on 6" cores

Typical Uses:
- Short-term (six months to one year) indoor wall graphics
- Designed for smooth, flat surfaces

Tip:
- Lamination is NOT recommended. Print to edge only with latex and offset inks.

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel	– 24 hr	**0.85**
Quick Tack on SS, lb./in2		**0.80**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	MD CD	**0.40** **0.20**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **–20° to 158°F** (-6° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
WN628W54	54" x 100'	44
WN628W60	60" x 100'	50
Custom Sizes		
WN628W546SL	54" x up to 750'	na
WN62738	27" x 38" Sheets	40

Application: Wall Graphics
Material: wallNOODLE

mactac® **19**

IMAGin® by MACtac®

Specialty | Solvent-based, UV Cured Ink Jet Media

IMAGin® deco fresco™

3yr · TEXTURED finish · wall · Removable

NEW! **IMAGin® DecoFresco™** wall media expands Mactac's popular décor product range with a unique finish that can be used on almost any smooth wall. DecoFresco is ideal for providing a short, medium or long term textured wall mural to any smooth surface. Easy to install and scratch resistant, DecoFresco has a unique texture and feel, which allows for a painted on appearance.

Features and Benefits:
- Non-woven Textured Vinyl Face
- Clear Removable Acrylic Adhesive
- 90# Polycoated Release Liner
- UV Ink Jet, Latex, and Solvent Printable
- 2-3 Year Indoor Durability

Typical Uses:
- Hospitality Décor
- High-end Retail
- Home Décor
- General Uplifting
- Museum Exhibits
- Trade Shows

Application: Wall Graphics
Material: IMAGin® DecoFresco™

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Stainless Steel - 24 hr	**2.1**
Quick Tack on SS, lb./in2	**2.1**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)	**max 0.5**

Temperature Ranges
     Minimum Application:
     End Use:
	
	50°F (+10°C)
	-4° to 160°F
	(-20° to 70°C)

Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
DFO52W54L100	54" x 100'	48

IMAGin® deco mural™

7yr · TEXTURED finish · wall · Permanent

NEW! **IMAGin® DecoMural™** expands Mactac's popular décor product range with a unique finish that can be used on almost any smooth wall. DecoMural is ideal for providing a long term textured wall mural to any smooth wall. Easy to install and scratch resistant, DecoMural has medium texture and feel, which allows for a clean rich looking graphic.

Features and Benefits:
- Non-woven Textured Vinyl Face
- Clear Permanent Acrylic Adhesive
- 74# Polycoated Release Liner
- UV Ink Jet, Latex, and Solvent Printable
- 5-7 Year Indoor Durability

Typical Uses:
- Hospitality Décor
- High-end Retail
- Home Décor
- General Uplifting
- Museum Exhibits
- Trade Shows

Application: Wall Graphics
Material: IMAGin DecoMural™

Physical Properties	Typical Values
Peel Adhesion, lb./in. 180° on Glass - 24 hr	**2.0**
Quick Tack on Glass, lb./in2	**2.3**

Dimensional Stability (shrinkage), %
48 hours @ 158°F (70°C)
          MD
          CD
	
	max 0.2
	max 0.2

Fire Classification
          Fire
          Smoke
	
	Class B
	Production S2

Temperature Ranges
     Application:
 	
     End Use:
	
	50°F to 104°F
	(+10°C to 40°C)
	-5° to 160°F
	(-20° to 70°C)

Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
DM032W49L82	49" x 82'	50

JDT429 **is a 4.0-mil soft white gloss, calendered PVC film designed for solvent-based ink jet printing**. The product is coated on one side with a semi-permanent, black opaque, acrylic pressure-sensitive adhesive and supplied with a 74# Kraft liner. JDT429 is designed for short-term outdoor mobile advertising on flat to slightly curved surfaces. It is ideal for public transportation vehicles such as busses, taxis and subway trains.

Features and Benefits:
- 4.0-mil gloss white vinyl
- Semi-permanent, black opaque, acrylic pressure-sensitive adhesive
- Three year durability
- Available on 6" core
- CBS approved

Typical Uses:
- Bus, taxi and subway train applications
- Station domination programs
- Applications needing a true blockout adhesive

Use with:
- ColorGard™ LUV Series - page 33

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Glass	- 20 min. -24 hr	**0.95-1.8** **2.1-3.0**
Quick Tack on SS, lb./in2		**0.95-1.8**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 0.2**
Temperature Ranges Minimum Application: End Use:		**46°F** (8°C) **-4° to 158°F** (-20° to 70°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
JDT429W64	64" x 164'	50
JDT429W54	54" x 164'	47
JDT429W546	54" x 328'	94
JDT429W30*	30" x 164'	25
* 2 Roll minimum		

Application: Bus Graphics
Material: IMAGin® digiTrans

IMAGin® WindowVIEW™ WP129 **is a promotional 6.0-mil soft white vinyl film, coated with a black semi-permanent adhesive and a 60/40 perforation with a 1.6 mm hole diameter and 2.4 mm between holes for one-way visibility.** The product is supplied with an 86# stable white kraft liner. WP129 is designed for solvent and eco-solvent ink jet printing for window graphics viewed from one side and "see-through" from the other side.

Features and Benefits:
- 60/40 hole to printable media ratio
- Semi-permanent adhesive
- One year outdoor durability

Typical Uses:
- Transit and vehicle
- Storefront advertising

Use with:
- PERMACOLOR® RAYZor™ Gloss LF3640 with Polyester liner only - pg 30

Physical Properties		Typical Values
Peel Adhesion, lb./in. 180° on Glass	- 24 hr	**1.0-2.0**
Quick Tack on Glass, lb./in2		**1.4-2.3**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C)		**max 0.2**
Temperature Ranges Minimum Application: End Use:		**50°F** (+10°C) **0° to 140°F** (-15° to 60°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
WP129W54L164	54" x 164'	47

Application: Fleet Graphics
Material: IMAGin WindowVIEW

Perforated One-Way Visability Films | Ink Jet Media

IMAGin WindowVIEW WV139 is a 6.0-mil soft white vinyl film with black reverse side and 70% print surface and 30% open area with a 1.4 mm hole diameter for one-way visibility.

The product is coated on one side with a removable, clear, acrylic pressure sensitive adhesive and supplied with a 6 mil paper release liner. WV139 is designed for solvent based and latex ink jet printing for window graphics viewed from one side and "see-through" from the other side.

Features and Benefits:
- 70/30 hole to printable media ratio
- Removable adhesive
- Two year outdoor durability

Typical Uses:
- Transit and vehicle
- Storefront advertising

Use with:
- PERMACOLOR® RAYZor™ Gloss LF3640 with Polyester liner only – pg 30

Physical Properties	Typical Values
Thickness, inches (mm)	
Film plus adhesive	.0065
Film, adhesive and liner	.0125
Dimensional Stability (shrinkage), %	
48 hours @ 158°F (70°C)	**fair**
Temperature Ranges	
Minimum Application:	**40°F** (+10°C)
End Use:	**0° to 140°F** (-15° to 60°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Weight: Pounds
WV139W54L25	54" x 25'	
WV139W54L100	54" x 100'	47

IMAGin® WindowVIEW™ WV159 is an 8.0-mil soft white vinyl film with black reverse side and 50% perforated with a 1.5 mm hole diameter for one-way visibility.

The product is coated on one side with a semi-permanent, clear, acrylic pressure-sensitive adhesive and supplied with a 7.0-mil film release liner with a clear back laminate. WV159 is designed for solvent-based and UV ink jet printing for window graphics viewed from one side and "see-through" from the other side.

Features and Benefits:
- 50/50 hole to printable media ratio
- Semi-permanent adhesive
- Three year outdoor durability

Typical Uses:
- Transit and vehicle
- Storefront advertising

Use with:
- PERMACOLOR® RAYZor™ Gloss LF3640 with Polyester liner only – pg 30

Application: Transit Graphics
Material: IMAGin WindowVIEW window perf

Physical Properties		Typical Values
Peel Adhesion, lb./in.		
180° on Glass	– 24 hr	**0.23-1.10**
Quick Tack on Glass, lb./in2		**0.6-0.17**
Dimensional Stability (shrinkage), %		
48 hours @ 158°F (70°C)		**max 0.2**
Temperature Ranges		
Minimum Application:		**50°F** (+10°C)
End Use:		**0° to 140°F** (-15° to 60°C)
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.		

Stock No.	Roll Width x Length	Weight: Pounds
WP159W54L25	54" x 25'	
WP159W54L100	54" x 100'	47

PERMACOLOR®...because your image is everything.

Choose **PERMACOLOR** films from Mactac® - the most complete line of mounting and laminating products designed to protect graphic images while enhancing their appearance. **PERMACOLOR** films are ideal for use with photographic, ink jet, electrostatic, lithographic and screen-printed images.

PERMACOLOR films are available in a variety of finishes to suit any application need and a variety of sizes, so even the smallest image can be protected.

Most **PERMACOLOR** films offer an aggressive pH-neutral adhesive and are compatible with sensitive paper substrates.

Both pressure-sensitive and thermal films can be applied with industry standard laminators.

Features:

- Wide variety of finishes (high-gloss, gloss, semi-gloss, matte, semi-matte, lustre)
- Line of tough laminates for rollable graphics
- Optically-clear films for enhanced photo clarity and color vibrancy
- Specifically designed for protection of digital images
- Wide variety of thicknesses for easy handling and display
- Cast vinyl for ultra conformable applications

Benefits:

- Uniform appearance across a broad range of substrates
- Indoor and outdoor versatility
- Superior UV protection for long-lasting prints
- Compatible with cold roll and thermal laminators
- Outstanding image protection
- Thermal laminates can be used on water-based ink jet prints
- pH-neutral adhesive

PermaPrint® High-Performance Mounting Films
PermaFlex® High-Performance Rigid PS Overlaminates
PermaGard® High-Performance Clear PS Overlaminates
PermaTrans® High-Performance Face Mounting Films
PERMACOLOR PromoGard Short-Term Digital PS Overlaminates

PERMACOLOR®

Overlaminates & Mounting Films

Product Series	Description	Window	Indoor Floor	P.O.P./Indoor	Trade Show	Full & Partial Fleet Wraps	Full & Partial Vehicle Wraps
High-Performance Overlaminates							
PermaFlex® - IP6000 Lustex® 15	15.0-mil polycarbonate film overlaminate		✓		✓		
PermaFlex - IP6200 Lustex 5	5.0-mil polycarbonate film overlaminate		✓		✓		
PermaFlex - PF6300	5.0-mil clear, textured lustre vinyl flim overlaminate		✓		✓		
PermaGard® - PG7036	2.0-mil gloss polyester film overlaminate	✓		✓	✓		
PermaGard - PG7285	3.2-mil matte vinyl film overlaminate			✓	✓		
PermaGard - PG7284	3.2-mil lustre vinyl film overlaminate			✓	✓		
PermaGard - PGD6000	1.0-mil topcoated polyester overlaminate			Dry Erase			
PERMACOLOR® RAYZor - LF3640	1.5-mil clear, gloss, highly conformable cast PVC film	✓	✓			✓	✓
PERMACOLOR RAYZor - LF3640G	1.5-mil clear, gloss, highly conformable cast PVC film	✓				✓	✓
PERMACOLOR RAYZor - LF3630G	1.5-mil clear, matte, highly conformable cast PVC film					✓	✓
PERMACOLOR HORIZon™ - XL1000	1.5-mil clear, high-gloss polyurethane film					✓	✓
PERMACOLOR® Enhancers	2.5-mil Brilliant Crystal, 3.0-mil Silver Metalliic			✓	✓	Partial	Partial
Intermediate Overlaminates							
ColorGard™ LUV	3.0-mil gloss vinyl overlaminate			✓	✓		
ColorGard LUV	3.2-mil matte vinyl overlaminate			✓	✓		
ColorGard LUV	3.2-mil lustre vinyl overlaminate			✓	✓		
PERMACOLOR PromoGard PG7000	3.0-mil gloss/matte/lustre vinyl overlaminates			✓	✓		
PermaFlex - PF6400	3.75-mil gloss, textured polyolefin film	✓		✓	✓		
PermaFlex - PF6500 Textured	4.3-mil textured vinyl	✓		✓	✓		
Intermediate & High-Performance Mounting Films							
PermaPrint - IP5000	Mounting Film Opaque, double-coated			✓	✓		
PermaTrans® - PT2100	Mounting Film Optically clear, double-coated	✓		✓	✓		
PermaPrint® - PP2011	Mounting Film Clear, double-coated			✓	✓		
PermaPrint - PP2013	Mounting Film Clear, double-coated			✓	✓		
PermaPrint - PP2018	Mounting Film Clear, double-coated			✓	✓		
ColorTrans - CT2200	Optically clear, permanent/removable mounting film	✓		✓	✓		
PERMACOLOR GEMINI™ XT - PP5000	Mounting Film Opaque, double-coated			✓	✓		
PERMACOLOR GEMINI XT - PP5600	Mounting Film, Clear, double-coated			✓	✓		

Boats	Museum	Light Box	Bus	Untreated Concrete	Walls	Adhesive Liner / Durability	B-free 5500 PRO, Gruv 929	B-free Gruv 729	IMAGin 5800, M Series, Gruv 529	IMAGin PrintVinyl	IMAGin RoughRAP	IMAGin StreetRap
						Permanent, clear acrylic 3.0-mil PET / 3-5 yrs indoor		✓				
	✓				✓	Permanent, clear acrylic 1.5-mil PET / 3-5 yrs indoor		✓				
	✓			✓	✓	Permanent, clear acrylic 60# Yellow glassine/ 3 yr outdoor	✓	✓	✓			✓
	✓					Permanent, clear acrylic 1.5-mil PET / 3-5 yrs outdoor		✓	✓			Wall
	✓				✓	Permanent, clear acrylic 60# White kraft / 3-5 yrs outdoor		✓	✓			Wall
	✓				✓	Permanent, clear acrylic 60# White kraft / 3-5 yrs outdoor		✓	✓			Wall
					✓	Permanent, clear acrylic 1.5-mil PET / 2 yr indoor		✓	✓			Wall
✓			✓	Walls	✓	Permanent, clear acrylic 1.2-mil PET / 5 yrs out & 8 yrs indoor	✓	✓			✓	
✓			✓	Walls	✓	Permanent, clear acrylic 50# Calendered paper / 5 yrs out & 8yrs in	✓	✓			✓	
✓				Walls	✓	Permanent, clear acrylic 1.2-mil PET or 50# Calendered paper 5 yrs out & indoor	✓	✓			✓	
✓			✓		✓	Permanent, clear solvent acrylic, 50# liner / 5-8 yrs vertical, 3-5 yrs horizontal surfaces	✓					
✓						Clear solvent acrylic 78# White kraft / 5 yr	✓	✓	✓	✓		
			✓		✓	Permanent, clear acrylic 46# Clay-coated Kraft / 4 yr			✓	✓		Wall
			✓		✓	Permanent, clear acrylic 46# Clay-coated Kraft / 4 yr			✓	✓		Wall
			✓		✓	Permanent, clear acrylic 46# Clay-coated Kraft / 4 yr			✓	✓		Wall
						Permanent, Clear acrylic 40# Calendered Paper / 2 yr outdoor				✓		
	✓				✓	Permanent, clear acrylic 50# Calendered paper/ 1 month indoor floor, 1 yr indoor wall	✓	✓				
	✓				✓	50# White kraft / 3 yr outdoor	✓	✓	✓			Wall
	✓					Permanent, opaque acrylic 92# PolyCoated / 3-5 yrs indoor						
	✓	✓				Permanent, double-coated clear acrylic 1.5-mil PET / 3 yrs outdoor						
	✓					Permanent, clear acrylic 60# Glassine / 3-5 yrs indoor						
						Permanent, rubber 60# Glassine / 3-5 yrs indoor						
	✓					Permanent, acrylic White Kraft / 3-5 yrs indoor						
	✓	✓				Permanent/removable clear acrylic 1.5-mil PET /up to 6 month removability						
						Permanent/aggressive opaque rubber-based						
						Permanent/clear rubber-based						

RECOMMENDED INK JET MEDIA

PERMACOLOR®

High-Performance | Rigid PS Overlaminates

PermaFlex®

PHOTO graphics | TEXTURED finish | ROLLABLE graphics | UV

Application: Museum Display
Material:PermaFlex® IP6000

IP6000 Lustex® 15 is a 15-mil polycarbonate film with a special "Lustex" surface. The low gloss texture helps eliminate glare and provides a very unique and pleasing viewing surface. This product can be used as an overlaminate for indoor as well as outdoor applications. IP6000 not only provides protection from abrasion and moisture, it also helps retard color fade caused by ultraviolet (UV) light exposure.

Features and Benefits:
- 15.0-mil textured lustre finish polycarbonate
- Eliminates glare

Typical Uses:
- Trade show displays
- Counter mats

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive	**0.0165** (419)
White Light Transmission, % (Note: Glass =100)	**92**
Gloss, (60° angle)	**12**
Adhesive PH	**Neutral**
Co-efficient of Expansion	**1.7 X10-5 in/in/°C**
Temperature Ranges Application: **Above 50° F** (10°C) for best results End Use: **-20° to 200° F** (-29° to 93°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
IP6007W37L150	37" x 150'	69
IP600775	37" x 75'	39
(wound on 6" I.D. cores with adapters for 3")		

PermaFlex®

FLOOR graphics | TEXTURED finish | ROLLABLE graphics | UV

Tips

These optically-clear overlaminating films enhance photos and transparencies, ink jet, lithographic and screen printed images. They also protect against abrasion, moisture and other potentially damaging effects in both indoor and outdoor environments, including color fading caused by prolonged exposure to UV light. Available in a wide variety of finishes.

Prior to rolling graphics allow a 2-4 hour wet-out period for the adhesive system to build a

IP6200 Lustex 5 is a 5.0-mil polycarbonate film with a special "Lustex" surface. The low-gloss texture helps eliminate glare and provides a very unique and pleasing viewing surface. This product can be used as an overlaminate for indoor as well as outdoor applications. IP6200 not only provides protection from abrasion and moisture, it also helps retard color fade caused by ultraviolet (UV) light exposure.

Features and Benefits:
- Exceeds industry standards for slip resistance

Typical Uses:
- Floor graphics
- Trade show headers
- Mouse pads

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive	**0.0065** (165)
White Light Transmission, % (Note: Glass =100)	**92**
Gloss, (60° angle)	**15**
Adhesive PH	**Neutral**
Co-efficient of Expansion	**1.7 X10-5 in/in/°C**
Temperature Ranges Application: **Above 50° F** (10°C) for best results End Use: **-20° to 200° F** (-29° to 93°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
IP6202W51L150	51" x 150'	41
IP6202W37L150	37" x 150'	30

PERMACOLOR®

PF6300 **is a 5.0-mil clear vinyl film with a textured lustre finish that helps to eliminate glare and provides a very unique and pleasing viewing surface**. This product can be used as an overlaminate for indoor as well as outdoor applications. PF6300 not only provides protection from abrasion and moisture, it also helps retard color fade caused by ultraviolet (UV) light exposure.

Features and Benefits:

- Thin enough for retractable banners yet durable enough for floor graphics

Typical Uses:

- Floor graphics
- Trade show displays
- Retractable banners

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive	**0.00591** (150)
Quick Tack on Glass, lb./in2 (N/25mm)	**5.0** (22)
Peel Adhesion, lb/in. (N/25 mm) Glass- 20 min. - 24 hr	**5.0** (22) **5.5** (24)
Adhesive PH	**Neutral**
Temperature Ranges Application: **32° to 120° F** (0° to 49°C) for best results End Use: **-22° to 140° F** (-29° to 60°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PF6354L100	54" x 100'	30
PF6315	53.9" x 164'	40
PF6314	40.9" x 164'	35

PermaFlex®

PHOTO graphics | TEXTURED finish | FLOOR graphics | UV

Application: Wall Graphics
Material: PermaFlex® PF6300

PF6400 **is a 3.75-mil Polyolefin film with a semi-gloss textured finish to enhance graphics**. PF6400 is ideal for short-term indoor floor graphics and is rated for slip-resistance under ASTM C-1028. PF6400 not only provides protection from abrasion and moisture, but also helps retard color fade caused by exposure to ultraviolet (UV) light.

Features and Benefits:

- Cost effective enough for short-term promotions
- Does not finger print

Typical Uses:

- Floor graphics
- Wall murals
- P.O.P. and trade show displays

Use with:

- IMAGin® JT5828R & JT5829R - pg 12
- B•free® GRUV GV429R - page 14
- M Series - page 16
- IMAGin DigiTrans™ - page 21

Physical Properties	Typical Values
Thickness, inches (μm) Film plus adhesive	**0.047** (120)
180°Peel Adhesion, lb/in. (N/25 mm) Glass- 20 min. - 24 hr	**1.5** (6.5) **2.0** (8.7)
Adhesive PH	**Neutral**
Temperature Ranges Application: **50° to 100° F** (10° to 38°C) for best results End Use: **-40° to 180°F** (-30° to 82°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PF6454	54" x 150'	34

PermaFlex®

DIGITAL graphics | TEXTURED finish | FLOOR graphics | UV

Application: Floor Graphic
Material: PERMACOLOR® PF6400

Rigid PS Overlaminates

PermaFlex®

PF6500 **is a 5.3-mil vinyl film with a textured finish to enhance graphics**. PF6500 is ideal for short-term indoor floor graphics and is rated for slip-resistance under ASTM C-1028. PF6500 not only provides protection from abrasion and moisture, but also helps retard color fade caused by exposure to ultraviolet (UV) light.

Features and Benefits:
- Tough, textured laminate for indoor and short-term outdoor walkway graphics
- Does not finger print

Typical Uses:
- Floor graphics
- Wall murals
- P.O.P. and trade show displays

Use with:
- IMAGin® JT5828R & JT5829R - page 12
- B•free® GRUV™ GV429R - page 14
- M Series - page 16
- IMAGin DigiTrans™ - page 21

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0053** (135)
Quick Tack SS , lb./in2 (N/25mm)	**2.3** (10)
180°Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr	**2.9** (13) **3.5** (16)
Adhesive PH	**Neutral**
Temperature Ranges Application: **40° to 120° F** (5° to 50°C) for best results End Use: **-50° to 225°F** (-45° to 107°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PF6538	38" x 164'	38
PF6554L150	54" x 150'	47

High-Performance | Clear PS Overlaminates

PermaGard®

Application: Photographic Lamination
Material: PermaGard®

PG7036 Gloss **is a clear polyester film coated on one side with a clear acrylic pressure-sensitive adhesive**. A clear polyester release liner that provides complete visual inspection of the product, easy liner removal and distortion-free adhesive surface protects the adhesive. PG7036 not only provides protection from abrasion and moisture, it also helps retard color fade caused by ultraviolet (UV) light exposure.

Features and Benefits:
- Gloss finish enhances photos to make colors more vibrant and true
- UV inhibitors help reduce color fade
- Clear liner allows for an ultra smooth adhesive surface

Typical Uses:
- Lamination of photographic and digital images to enhance color and provide image protection

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive Total product	**0.0035** (88.8) **0.005** (127)
Quick Tack on SS, lb./in2 (N/25mm)	**2.5** (11)
Shear, hours to fail - Stainless Steel	**150**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr	**3.5** (15.5) **4.5** (19.5)
White Light Transmission, %	**98** (Note: Glass=100)
Gloss (60° angle)	**100**
Adhesive PH	**Neutral**
Temperature Ranges Application: **Above 50° F** (10°C) for best results End Use: **-20° to 200° F** (-29° to 93°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PG7036W60L164	60.5" x 164'	33
PG7036W54L164	54" x 164'	34
PG7036W51L328*	51" x 328'	63
PG7036W51L164	51" x 164'	32
PG7036W41L164	41" x 164'	25

* 49 day lead time

PERMACOLOR®

PG7284 Lustre is a vinyl film coated on one side with a clear acrylic pressure-sensitive adhesive. An easily removed white paper liner protects the adhesive. PG7284 provides a uniform, lustre surface while protecting from abrasion, moisture and other potentially damaging effects. It also helps retard color fade caused by ultraviolet (UV) light exposure

PermaGard®

PHOTO graphics | LUSTRE finish | pH neutral | UV

Features and Benefits:
- Eliminates glare without reducing image clarity
- UV inhibitors protect image from color fade

Typical Uses:
- Museum graphics
- Retail graphics
- Trade show displays
- Fine art

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive Total product	**0.0038** (114) **0.053** (279)
Quick Tack on SS, lb./in2 (N/25mm)	**2.8** (12.5)
Shear, hours to fail - Stainless Steel	**150**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**4.0** (16)
Adhesive PH	**Neutral**
Temperature Ranges Application: **Above 50° F** (10°C) for best results End Use: **-20° to 150° F** (-29° to 66°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Application: Fine art lamination
Material: PermaGard®

Stock No.	Roll Width x Length	Weight: Pounds
PG7284W60L164	60" x 164"	33
PG7284W54L164	54" x 164'	34
PG7284W51L328~	51" x 328'	63
PG7284W51L164	51" x 164'	32
PG7284W41L164	41" x 164'	25

~ 84 day lead time/60 roll minimum

PG7285 Matte is a vinyl film coated on one side with a clear acrylic pressure-sensitive adhesive. An easily removed white paper liner protects the adhesive. PG7285 provides a uniform, matte surface that protects from abrasion, moisture and other potentially damaging effects. It also helps retard color fade caused by ultraviolet (UV) light exposure.

PermaGard®

PHOTO graphics | MATTE finish | pH neutral | UV

Features and Benefits:
- Ultimate matte finish controls glare without taking away from appearance of the graphic
- UV inhibitors protect image from color fade

Typical Uses:
- Museum graphics
- Trade show displays

Physical Properties	Typical Values
Thickness, inches (micron) Film plus adhesive Total product	**0.0047** (119) **0.0097** (246)
Quick Tack on SS, lb./in2 (N/25mm)	**2.8** (12.5)
Shear, hours to fail - Stainless Steel	**150**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**4.0** (17.5)
White Light Transmission, %	**90** (Note: Glass=100)
Adhesive PH	**Neutral**
Temperature Ranges Application: **Above 50° F** (10°C) for best results End Use: **-20° to 150° F** (-29° to 66°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Tip

Cleaning instructions for clear PS overlaminates:
1) Use a clean, soft, lint-free cloth.
2) Use standard glass cleaner (Windex™, Glass Plus™, etc.).
3) Spray the cleaner onto the cloth, NOT onto the image. Do not over saturate the cloth.
4) Wipe down the image with the wet cloth.
5) Dry with a clean, soft, dry cloth.
6) If the edges of the image are not sealed, take care not to introduce cleaner to the adhesive. Over time, edge lifting will occur (Mactac recommends you always seal the edges of a graphic during the finishing process).

When cleaning PG7034 or rigid PS overlaminates (IP6000, IP6100, IP6200 and PF6300) please refer to Mactac TA2063.

Stock No.	Roll Width x Length	Weight: Pounds
PG7285W60L164	60" x 164'	33
PG7285W54L164	54" x 164'	34
PG7285W51L328*	51" x 328'	63
PG7285W51L164	51" x 164'	32
PG7285W41L164	41" x 164'	25

* 49 day lead time

mactac®

High-Performance | Digital Overlaminates

PERMACOLOR®
RAYZor™
OVERLAMINATES

5yr | **GLOSS** finish | **CURVED** surface | **Semi Permanent**

Application: Vehicle Wrap
Material: PERMACOLOR RAYZor Gloss

LF3640 PERMACOLOR® RAYZor™ Gloss is a 1.5-mil clear gloss; highly conformable cast PVC film.

The product is coated on one side with a clear permanent, acrylic pressure-sensitive adhesive. LF3640G is designed for use with GV929 and JT5529BFDPRO in long-term outdoor, marine, fleet or vehicle markings on flat, curved, corrugated and riveted surfaces. Additional UV protection is built into the over-laminating film to help extend the life of your graphic by resisting color fade caused by ultraviolet light. LF3648 with 1.2-mil polyester liner is recommended for use on window perf.

Features and Benefits:
- 1.5-mil ultra conformable cast vinyl film
- Clear permanent acrylic adhesive
- Built-in UV protection
- Gloss finish
- Part of the B•free® application warranty

Typical Uses:
- Highly conformable for vehicle graphics, fleet, marine and textured wall graphics
- Image enhancement
- Marine graphics
- LF3648 with polyester liner used for perforated window film

Use with:
- B•free® JT5529BFD PRO - page 8
- B•free GRUV™ - pgs 8-9, 15
- IMAGin® windowVIEW - pgs 21-22

Physical Properties		Typical Values
Peel Adhesion, lb/in. (N/25 mm)		
Stainless Steel	- 20 min.	**3.0** (13.1)
	- 24 hr	**3.7** (16.5)
Quick Tack SS , lb./in2 (N/25mm)		**2.5** (11)
Dimensional Stability, (in.)		
48 hours@158°F		**max 0.01**
Temperature Ranges		
Application:	**40° F** (4°C) for best results	
End Use:	**-50° to 225° F** (-45° to 107°C)	
Shelf Life:		
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.		

Stock No.	Roll Width x Length	Weight: Pounds
LF3649G	60” x 150’	34
LF3648	54” x 150’	30
LF3648G	54” x 150’	30
LF3642G*	30” x 150’	17

* 2 Roll minimum

PERMACOLOR®
RAYZor™
OVERLAMINATES

5yr | **MATTE** finish | **CURVED** surface | **Semi Permanent**

Application: Vehicle Wrap
Material: PERMACOLOR RAYZor Matte

LF3630 PERMACOLOR RAYZor Matte is a 1.5-mil clear matte; highly conformable cast PVC film.

The product is coated on one side with a clear permanent, acrylic pressure-sensitive adhesive and supplied with a 50# release liner. LF3640 is designed for use with JT5529BFDPRO and WW100 in long-term outdoor, marine, fleet or vehicle markings on flat, curved, corrugated and riveted surfaces. Additional UV protection is built into the over-laminating film to help extend the life of your graphic by resisting color fade caused by ultraviolet light.

Features and Benefits:
- 1.5-mil ultra conformable cast vinyl film
- Clear permanent acrylic adhesive
- Built-in UV protection
- Matte finish
- Part of the B•free application warranty

Typical Uses:
- Highly conformable for vehicle graphics, fleet, marine and rough wall graphics

Use with:
- B•free JT5529BFD PRO - page 8
- B•free GRUV - pgs 8-9, 15
- RoughRAP™ WW100 - pg 18

Physical Properties		Typical Values
Peel Adhesion, lb/in. (N/25 mm)		
Stainless Steel	- 20 min.	**2.0** (8.7)
	- 24 hr	**3.1** (13.2)
Quick Tack SS , lb./in2 (N/25mm)		**2.5** (11)
Dimensional Stability, (in.)		
48 hours@158°F		**max 0.01**
Temperature Ranges		
Application:	**58° F** (10°C) for best results	
End Use:	**-50° to 225° F** (-45° to 107°C)	
Shelf Life:		
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.		

Stock No.	Roll Width x Length	Weight: Pounds
LF3638G	54” x 150’	30
LF3639G	60” x 150’	34

PERMACOLOR®

PERMACOLOR® *Enhancers*

6300 Metallic Enhancers are premium 2.5-mil Brilliant Crystal and 3.0-mil Silver Metallic, cadmium-free clear cast vinyls with high-gloss and high concentration of light refracting additives for a glistening appearance on the surface of your substrate or to use as an overlaminating film to greatly enhance your high quality graphics.

Coated with a high-performance permanent, clear solvent acrylic adhesive protected with 78# bleached white kraft liner for good stability and layflat.

Features and Benefits:
- 2.5 and 3.0-mil cast vinyl
- Permanent solvent acrylic adhesive
- Five year outdoor durability
- Two enhancers finishes

Typical Uses:
- Overlaminate - flat, slightly curved applications
- Vehicle, fleet and marine graphics
- Colored vinyl enhancement
- General signage

Use with:
- B•free® JT5529BFD PRO - page 8
- B•free GRUV™ GV929 - page 8
- B•free GRUV GV729 - page 9

Physical Properties	Typical Values
Thickness, inches (µm)	
Crystal - Film plus adhesive	**0.0037** (94)
Silver/Prism - Film plus adhesive	**0.0042** (107)
Dimensional Stability (shrinkage)%	
48 hours @ 158°F (70°C)	
Bonded aluminum	**0.1**
Peel Adhesion, lb/in. (N/25 mm)	
Stainless Steel - 30 min.	**2.8** (12.7)
- 24 hr	**4.0** (17.8)
Face Material Data, 68°F (20°C)	
Tensile strength lb./in. (N/m)	**>7.5** (13.00)
Elongation %	**>120%**
Temperature Ranges	
Application: **40° to 104° F** (5° to 40°C) for best results	
End Use: **-50° to 225°F** (-45° to 107°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
Silver Metallic		
CY63980054	54" x 50'	14
Brilliant Crystal		
CY639801	60" x 150'	42
CY63980154	54" x 50'	14

Application: Vehicle Wrap
Material: PERMACOLOR® Enhancers

Application: Vehicle Wrap
Material: PERMACOLOR Enhancers

XL1000 a 1.5-mil clear gloss; extremely conformable, extruded non-PVC film. The product is coated on one side with a clear permanent, solvent acrylic pressure sensitive adhesive and supplied with a 50# paper release liner.

Features and Benefits:
- Clear permanent solvent acrylic adhesive
- Up to 5-8 years on vertical surfaces and 3-6 years on horizontal surfaces

Typical Uses:
- Specially formulated to maintain clarity over the life of the wrap
- Help prevent color fading

Use with:
- B•free JT5529BFD PRO - page 8
- B•free GRUV™ GV929 - page 8

Physical Properties	Typical Values
Thickness, inches (µm)	
Film plus adhesive	**0.0025** (64)
Total product	**0.0039** (100)
Peel Adhesion, lb/in. (N/25 mm)	
180° on Stainless Steel - 20 min.	**3.3** (14.4)
- 24 hr	**3.4** (14.9)
Quick Tack on SS, lb./in² (N/25mm)	**3.0** (13.1)
Dimensional Stability, (in.)	
48 hours@158°F	**<0.1**
Temperature Ranges	
Min. Application:**40°** (4°C) for best results	
End Use: **-50° to 225°F** (-45° to 107°C)	
Gloss, (60°)	**95** Typical
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
XL1000	54" x 150'	32

PERMACOLOR® **HORIZ**on™

Application: Vehicle Partial Wrap
Material: PERMACOLOR® HORIZon™

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PERMACOLOR®

PermaGard®

DIGITAL graphics | GLOSS finish | DRY ERASE | UV

Application: Dry Erase
Material: PermaGard® PGD6000

Intermediate | Clear PS Overlaminates

PGD6000 **a 1.0-mil topcoated polyester designed for use as a dry-erase overlaminate**. With a clear acrylic adhesive and smooth polyester liner, PERMACOLOR PermaGard PG6000 can also add sparkle and protection to short-term indoor and outdoor signage and point-of-purchase graphics.

Features and Benefits:
- Gloss finish enhances appearance of the digital image
- UV inhibitors protect image from color fade
- Dry erase capabilities
- Short-term applications

Typical Uses:
- Menu boards
- Calendars
- White boards

Physical Properties	Typical Values
Thickness, inches (µm)	
Film plus adhesive	**0.0020** (51)
Total product	**0.0032** (81)
Quick Tack on SS, lb./in2 (N/25mm)	**1.5** (6.7)
Peel Adhesion, lb/in. (N/25 mm)	
Stainless Steel - 15 min.	**1.9** (8.2)
-24 hr	**2.5** (11)
Adhesive PH	**Neutral**
Temperature Ranges	
Application: **Above 40° F** (5°C) for best results	
End Use: **-40° to 180° F** (-40° to 82°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PDG6054L150	54" x 150'	18

PERMACOLOR®

ColorGard™ LUV

ColorGard™ LUV are vinyl overlaminating films coated on one side with clear **acrylic pressure-sensitive adhesive**. Proven performance for UV inks with a solvent acrylic adhesive. Recommended for indoor and outdoor applications, also helps reduce color fade caused by UV light exposure.

Features and Benefits:
- Gloss, Matte and Lustre
- Four year outdoor durability
- Excellent adhesive wet-out for no silvering
- Suitable for UV, solvent, latex and eco-solvent printed graphics
- Protection against UV light, moisture and abrasion

Typical Uses:
- General purpose lamination of digital images
- Murals and exhibits
- Event graphics
- Retail posters and displays

Use with:
- Intermediate Media

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive Total product	**0.0038** (96) **0.0053** (134)
Quick Tack, lb./in2 (N/25mm) Stainless Steel UV Ink Jet Print	**3.0** (13.2) **1.2** (8.3)
Shear, hours to fail Stainless Steel - 1000g@ 72°F (22°C)	**150**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. -24 hr	**3.5** (15.3) **4.2** (18.4)
Adhesive PH	**Neutral**
Temperature Ranges Application: **Above 45° F** (7°C) for best results End Use: **-40° to 150° F** (-10° to 66°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Application: Retail Poster
Material: PERMACOLOR LUV

Stock No. Gloss	Stock No. Matte	Stock No. Lustre	Roll Width x Length	Weight: Pounds
LUV8060W60L150	LUV8260W60L150	LUV8360W60L150	60.5" x 150'	37
LUV8054W54L150	LUV8254W54L150	LUV8354W54L150	54" x 150'	35
LUV8051W51L150	LUV8251W51L150	LUV8351W51L150	51" x 150'	33
LUV8051W38L150	LUV8251W38L150	LUV8351W38L150	38" x 150'	30

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PERMACOLOR®

PromoGard

2yr CLEAR FLAT surface Permanent

Short-Term | Digital PS Overlaminates

PG7000 gloss, **PG7200** matte and **PG7300** lustre are promotional overlaminating films that can be laminated to digital images including solvent- and eco-solvent ink jet, and water-based ink jet prints for protection from abrasion, moisture and other potential damage in both indoor and outdoor environments. PG7000, PG7200 and PG7300 are coated on one side with a clear acrylic pressure-sensitive adhesive and easily removed 40# liner.

Features and Benefits:
- Gloss finish - PG7000
  Matte finish - PG7200
  Lustre finish - PG7300
- Suitable for use over solvent, eco-solvent, UV and latex printed wide-format graphics
- Two year outdoor durability

Typical Uses:
- Protection of short-term indoor and outdoor graphics

Physical Properties	Typical Values
Thickness, inches (μm) Film plus adhesive Total product	**0.0040** (101) **0.0055** (139)
Quick Tack, lb./in2 (N/25mm) Stainless Steel	**1.5** (6.5)
Gloss, (60° angle)	**88**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. -24 hr	**2.5** (11) **2.8** (12.25)
Adhesive PH	**Neutral**

Temperature Ranges
Application: **Above 45° F** (7°C) for best results
End Use: **-20° to 150° F** (-30° to 66°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No. PG7000	Stock No. PG7200	Stock No. PG7300	Roll Width x Length	Weight: Pounds
PG7054	PG7254	PG7354	54" x 150'	48
PG7051	PG7251		51" x 150'	45

PERMACOLOR®

IP5000 Series consists of a thin, opaque plastic film coated on both sides with an acrylic pressure-sensitive adhesive. Moisture stable, polycoated Kraft liner protects the adhesive.

Designed for quick adhesion to a variety of mounting surfaces. Single release liner permits easy lamination and eliminates the need to remove a second liner.

Features and Benefits:
- One paper release liner allows for fast lamination

Typical Uses:
- Mounting of images to black gator, Sintra®
  and other difficult substrates

Physical Properties	Typical Values
Thickness, inches (µm) Carrier plus adhesive	**0.0038** (90)
Quick Tack on SS, lb./in2	**4.0** (17.5)
Shear, hours to fail - Stainless Steel	**150**
Peel Adhesion, lb/in. Stainless Steel - 30 min.	**4.5** (19)
- 24 hr	**5.0** (22)
Adhesive PH	**Neutral**
Temperature Ranges Application: **50° to 120° F** (10° to 49°C) for best results End Use: **-20° to 200° F** (-29° to 93°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
IP5040	60.25" x 150'	33
IP5001	51" x 400'	64
IP5002	51" x 150'	29
IP5008	38" x 150'	
IP5007	37" x 150'	20
IP5015	25" x 150'	

PermaPrint®

PHOTO graphics | opaque | pH neutral | Permanent

Application: Museum signage
Material: PermaPrint® IP5000

More Tips
Mactac's pressure-sensitive mounting films are intended for "cold roll lamination" (40°-104°F).

The addition of heat while simultaneous mounting with thermal overlaminates may result in curl or have other detrimental effects on the finished product.

Whenever possible, always test first to ensure end-use capability.

PT2100 Series is a thin, clear polyester film coated on both sides with a clear acrylic pressure-sensitive adhesive. Two clear polyester release liners protect the adhesive and permit complete visual inspection of the product and a distortion-free adhesive surface.

This optically-clear film, coated on two sides, was designed for face-mounting and back-mounting transparencies to Plexiglas® and other clear or transparent substrates. PT2100 helps protect mounted images from fading caused by ultra-violet (UV) light exposure.

Features and Benefits:
- Industry's best clarity
- UV inhibitors reduce color face
- Aggressive solvent acrylic adhesive
- Clear liners for inspection of product before lamination

Typical Uses:
- Face mounting of images for backlit applications, transparencies and when super smoothness is required

Physical Properties	Typical Values
Thickness, inches (µm) Adhesive	**0.0035** (132)
Total product	**0.0065** (190)
Quick Tack on SS, lb./in2	**5.0** (22)
Shear, hours to fail - Stainless Steel	**150**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**3.5** (13)
White Light Transmission, %	**98**
Adhesive PH	**Neutral**
Temperature Ranges Application: **50° to 120° F** (10° to 49°C) for best results End Use: **-20° to 200° F** (-29° to 93°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PT2160W60L328~	60.5" x 328'	117
PT2160W60L164	60.5" x 164'	58
PT2101W51L328	51" x 328'	98
PT2102W51L164	51" x 164'	49
PT2122W41L164	41" x 164'	40

~ 84 day lead time/40 roll minimum

PermaTrans®

UV | optically CLEAR | pH neutral | Permanent

Application: Exhibit Graphics
Material: PermaTrans® PT2100 Series

PERMACOLOR®

High-Performance | Mounting Films

ColorTrans™
TRANSPARENCY MOUNTING FILMS

CT2200 is an intermediate optically-clear adhesive mounting film engineered with a polyester carrier. It is coated on one side with an optically clear acrylic permanent adhesive and the other with an optically clear removable adhesive and supplied with two polyester release liners. Designed for face-mounting and back-mounting transparencies and graphics to Plexiglas™ and other clear or translucent substrates.

Features and Benefits:
- Optically-clear permanent/ removable mounting film
- 100% Chlorine, vinyl and phthalate-free
- Non-water whitening for wet application

Typical Uses:
- Light boxes/backlits
- Removable indoor and outdoor window signage
- Point-of-purchase displays
- Flat and slightly curved surfaces

Physical Properties	Typical Values
Thickness, inches (µm) Carrier plus adhesive	**0.0067**
Quick Tack , lb./in2 Glass	**Perm / Rem 2.8 / 2.5**
Shear, hours to fail - Stainless Steel	
Peel Adhesion, lb/in. Stainless Steel - permanent - removable	**4.0** **1.2**
Adhesive PH	**Neutral**
Temperature Ranges Application: **50° F** (10°C) for best results End Use: **-40° to 185° F** (-40° to 85°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
CT2241L150	41" x 150'	32
CT2251L150	51" x 150'	35
CT2254L150	54" x 150'	38
CT2261L150	61" x 150'	41

PermaPrint®

Application: Board Mounting
Material: PERMACOLOR® PP2011

PP2011 consists of a thin, clear polyester film coated on both sides with an acrylic pressure-sensitive adhesive. PP2011 is an economically designed mounting product with medium-tack, medium peel adhesion and high cohesive strength for quick adhesion to a variety of mounting surfaces and efficient processing through most roll laminators. White, moisture-stable, single release liner, protects the adhesive, permits easy lamination and eliminates the need to remove a second liner in applications where that may be difficult or impossible.

Features and Benefits:
- Low initial tack allows for easy fixing of mistakes
- One release liner for faster laminating

Typical Uses:
- General purpose mounting to substrates such as Fome-core®, Gator® board, Cresent® board, Masonite® and Sintra®

Physical Properties	Typical Values	
Thickness, inches (µm) Carrier plus adhesive	**0.0024** (60)	
Quick Tack , lb./in2 Glass	side 1/side 2 **2.1/3.0** (9/13)	
Shear, hours to fail - Stainless Steel	**>1000**	
Peel Adhesion, lb/in. Stainless Steel - 30 min. - 24 hr	**1.8/2.3** (8/10) **2.5/3.4** (11/15)	
Adhesive PH	**Neutral**	
Temperature Ranges Application: **40° to 120° F** (5° to 49°C) for best results End Use: **-20° to 212° F** (-29° to 100°C)		
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.		

Stock No.	Roll Width x Length	Weight: Pounds
IP2013	79" x 164'	67
PP3316164	60.2" x 164'	30
PP3315164	51.1" x 164'	26
PP3314164	40.9" x 164'	21

PERMACOLOR®

PermaPrint®

PP2013 **consists of a thin, clear polyester film coated on both sides with a solvent-based, rubber pressure-sensitive adhesive**. PP2013 is an economically designed mounting product with medium tack, medium peel adhesion and high cohesive strength for quick adhesion to a variety of mounting surfaces and efficient processing through most roll laminators. White, moisture-stable, single release liner, protects the adhesive, permits easy lamination and eliminates the need to remove a second liner in applications where that may be difficult or impossible.

Features and Benefits:
- Good for low energy surfaces such as Sintra®, plastic and styrene

Typical Uses:
- General purpose mounting of digital images

Physical Properties	Typical Values
Thickness, inches (µm) Carrier plus adhesive	**0.0024** (60)
Quick Tack on SS, lb./in2 (N/25mm)	**3.0** (13)
Shear, hours to fail - Stainless Steel	**250**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr	**2.4** (11) **2.8** (12)
Adhesive PH	**Neutral**
Temperature Ranges Application: **50° to 104° F** (10° to 40°C) for best results End Use: **-20° to 195° F** (-29° to 90°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PP3516	60.2" x 328'	60
PP3515	51.1" x 328'	53
PP3514	40.9" x 328'	42

PermaPrint®

PP2018 **is an economical general purpose mounting film consisting of a thin, clear polyester film coated on both sides with an acrylic permanent pressure-sensitive adhesive**. A white, moisture-stable, single release liner, protects the adhesive, permits easy lamination and eliminates the need to remove a second liner in applications where that may be difficult or impossible.

Features and Benefits:
- Economical for general purpose mounting
- Clear permanent mounting film
- Medium-tack and bond
- Single liner reduces waste

Typical Uses:
- Mounting graphics and photographic prints to graphic art boards
- Indoor and outdoor window signage
- Point-of-purchase displays
- Flat and slightly curved surfaces

Physical Properties	Typical Values
Thickness, inches (µm) Carrier plus adhesive	**0.0053** (60)
Quick Tack on SS, lb./in2 (N/25mm)	**Side 1 / Side 2** **2.5 / 2.0**
Shear, hours to fail - Stainless Steel	**>100**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**2.3**
Adhesive PH	**Neutral**
Temperature Ranges Application: **40° F** (+5°C) for best results End Use: **-20° to 194° F** (-30° to 90°C)	
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
PP2018W41L328	41" x 328'	42
PP2018W51L328	51" x 328'	53
PP2018W54L328	54" x 328'	56

mactac®

PERMACOLOR®

Intermediate | Mounting Films

PERMACOLOR® GEMINI XT™

**Application: Digital Image
Material: PERMACOLOR® GEMINI XT™**

PP5000 **is a thin**, **white polypropylene film** coated on both sides with an aggressive rubber-based, pressure sensitive adhesive. A white, polycoated coated 2-side, moisture stable paper liner protects the adhesive.

PP5000 is economically designed mounting product with a high-tack, high peel adhesion and high cohesive strength for quick adhesion to a wide variety of mounting surfaces and efficient processing through most roll laminators. The single release liner (self-wound) permits easy lamination and eliminates the need to remove a second liner in applications where that may be difficult or impossible.

Features and Benefits:
• Good for low energy surfaces such as Sintra, plastic and styrene

Typical Uses:
• General purpose mounting of digital images

Physical Properties		Typical Values
Thickness, inches (µm) Carrier plus adhesive		**0.005** (127)
Quick Tack on SS, lb./in2 (N/25mm)		**9.0** (39)
Shear, hours to fail - Stainless Steel		**600+**
Peel Adhesion, lb/in. (N/25 mm)		
Stainless Steel	- 30 min.	**11** (50)
Acrylic Panels	- 30 min.	**12** (45)
Sinatra Board	- 30 min.	**4.5** (19)
Digital Film	- 30 min.	**6.3** (28)
Digital Paper	- 30 min.	**5.3** (24)
Adhesive PH		**Neutral**
Temperature Ranges Application: >**50°** (10°C) for best results End Use: **-20° to 195° F** (-30° to 90°C)		
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.		

Stock No. PP5000	Roll Width x Length	Weight: Pounds
PP5042L150	42" x 150'	20
PP5051L150	51" x 150'	24
PP5051L400	51" x 400'	65
PP5054L150	54" x 150'	26
PP5054L400	54" x 400'	68

PERMACOLOR® GEMINI XT™

PP5600 **is a thin**, **clear polyester film** coated on both sides with an aggressive rubber-based, pressure sensitive adhesive. A white, polycoated coated 2-side, moisture stable paper liner protects the adhesive.

PP5600 is economically designed mounting product with a high-tack, high peel adhesion and high cohesive strength for quick adhesion to a wide variety of mounting surfaces and efficient processing through most roll laminators. The single release liner (self-wound) permits easy lamination and eliminates the need to remove a second liner in applications where that may be difficult or impossible.

Features and Benefits:
• Good for low energy surfaces such as Sintra, plastic and styrene

Typical Uses:
• General purpose mounting of digital images

Physical Properties		Typical Values
Thickness, inches (µm) Carrier plus adhesive		**0.005** (127)
Quick Tack on SS, lb./in2 (N/25mm)		**9.0** (39)
Shear, hours to fail - Stainless Steel		**600+**
Peel Adhesion, lb/in. (N/25 mm)		
Stainless Steel	- 30 min.	**11** (50)
Acrylic Panels	- 30 min.	**12** (45)
Sinatra Board	- 30 min.	**4.5** (19)
Digital Film	- 30 min.	**6.3** (28)
Digital Paper	- 30 min.	**5.3** (24)
Adhesive PH		**Neutral**
Temperature Ranges Application: >**50°** (10°C) for best results End Use: **-20° to 195° F** (-30° to 90°C)		
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.		

Stock No. PP5000	Roll Width x Length	Weight: Pounds
PP5642L150	42" x 150'	20
PP5651L150	51" x 150'	24
PP5651L400	51" x 400'	65
PP5654L150	54" x 150'	26
PP5654L400	54" x 400'	68

PERMACOLOR®

TL2000 3.0-mil & 5.0-mil High-Gloss is a family of clear, glossy PET films with a heat activated, polymeric adhesive on one side. The use of TL2000 lends depth and vibrancy to underlying images. Stiffness of the laminated image will vary with the PERMACOLOR® thickness selected as well as whether or not it is used on both sides. The thicker products provide maximum protection.

Features and Benefits:
- Enhances image to provide more vibrant colors
- UV inhibitors protect image from color fade
- Protects from moisture

Typical Uses:
- Retail displays

Physical Properties	Typical Values
Thickness	**3-mil** (1/2) **5-mil** (3/2)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
3-mil		
TL2031	51" x 500'	41
TL2033*	43" x 500'	35
TL2035	38" x 500'	32
TL2037*	33" x 500'	30
5-mil		
TL2051	51" x 250'	39
TL2053	43" x 250'	34
TL2055	38" x 250'	29
TL2057*	33" x 250'	26

* Special Order sizes 15 day lead time

THERMACOLOR®

DIGITAL graphics | HIGH GLOSS finish | UV | HEAT activated

Tip

The suggested laminating temperature is approximately 190°F (88°C) for 3-mil, 200°F (94°C) for 5-mil and 210°F (99°C) for 10-mil PERMACOLOR at a throughput speed of 3-5 ft./minute. The temperature and/or speed may need to be adjusted depending on the specific laminating equipment, thickness of the PERMACOLOR and desired throughput speed.

To increase production speed, temperature increases of 10-20°F (5-10°C) may permit operating at 10 ft./minute.

TL2100 10-mil High-Gloss is a family of clear, glossy PET films with a heat activated, polymeric adhesive on one side. The use of TL2100 lends depth and vibrancy to underlying images. Stiffness of the laminated image will vary with the PERMACOLOR thickness selected as well as whether or not it is used on both sides. The thicker products provide maximum protection.

Features and Benefits:
- Enhances image to provide more vibrant colors
- Protects image from UV color fade
- Protects image from moisture and abrasions

Typical Uses:
- Roll displays
- Retail displays

Physical Properties	Typical Values
Thickness	**10-mil** (7/3)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)
Shelf Life: Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.	

Stock No.	Roll Width x Length	Weight: Pounds
TL2101	51" x 250'	75
TL2103*	43" x 250'	64
TL2105	38" x 250'	56
TL2107*	33" x 250'	50

* Special Order sizes 15 day lead time

THERMACOLOR®

DIGITAL graphics | HIGH GLOSS finish | UV | HEAT activated

Tip

Be advised that a high temperature along with a slow running speed could cause blistering or waviness in the final laminated image. To correct this problem, try reducing the temperature or increasing the speed.

In addition, a low temperature and a high running speed could result in incomplete bonding and poor adhesive wet-out (sometimes referred to as "silvering"). To correct this problem, use adequate laminating pressure, raise the temperature slightly or slow the running speed.

Thermal Overlaminates

THERMACOLOR®

DIGITAL graphics | SATIN finish | UV | HEAT activated

Tip

In the physical properties box for the thermal films section, the thickness fraction is the composition of the film. The first number indicates the thickness of the film layer, the second number indicates the thickness of the adhesive layer. Typically the thicker the film layer is, the higher quality the laminate is.

TL4000 3.0-mil Satin Polyester is a family of clear, satin PET films with a heat activated, polymeric adhesive on one side. The use of TL4000 lends depth and vibrancy to underlying images. Stiffness of the laminated image will vary with the PERMACOLOR® thickness selected as well as whether or not it is used on both sides.

Features and Benefits:
- Lends body to image for easier handling and display
- Protects image from UV light
- Enhances color while cutting back on glare

Typical Uses:
- Retail displays
- Trade show displays

Physical Properties	Typical Values
Thickness	**3-mil** (1/2)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL4031	51" x 500'	40
TL4033*	43" x 500'	34
TL4035	38" x 500'	31
TL4037*	33" x 500'	29

* Special Order sizes 15 day lead time

THERMACOLOR®

DIGITAL graphics | MATTE finish | UV | HEAT activated

TL5600 3.0-mil Matte Polyester is a family of flat, non-glare (matte) clear PET films with a heat activated, polymeric adhesive on one side. The use of TL5600 lends depth and vibrancy to underlying images, has built in scratch resistance and offers no-glare surface where bright overhead lighting makes glossy finished films impossible to see.

Features and Benefits:
- Non-glare matte finish
- Protects image from contaminates and UV light.

Typical Uses:
- Retail displays
- Signage

Physical Properties	Typical Values
Thickness	**3-mil** (0.5/2.5)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL5631	51" x 500'	40
TL5633*	43" x 500'	34
TL5635	38" x 500'	31
TL5637*	33" x 500'	29

* Special Order sizes 15 day lead time

PERMACOLOR®

THERMACOLOR®

TL5000 5.0-mil Matte Polyester is a family of flat, non-glare (matte) clear PET films with a heat activated, polymeric adhesive on one side. The use of TL5000 lends depth and vibrancy to underlying images, has built in scratch resistance and offers a no-glare surface where bright overhead lighting makes glossy finished films impossible to see.

Features and Benefits:
- Eliminates glare
- Protects image from UV color fade
- Protects image from moisture and other contaminates

Typical Uses:
- Trade show displays
- P.O.P. displays

Physical Properties	Typical Values
Thickness	**5-mil** (3/2)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL5051	51" x 250'	39
TL5053*	43" x 250'	34
TL5055	38" x 250'	29
TL5057*	33" x 250'	26

* Special Order sizes 15 day lead time

Application: Rollable Graphics
Material: Thermal Overlaminate

DIGITAL graphics · MATTE finish · UV · HEAT activated

TL5100 10-mil Matte Polyester is a family of flat, non-glare (matte) clear PET films with a heat activated, polymeric adhesive on one side. The use of TL5000 lends depth and vibrancy to underlying images, has built in scratch resistance and offers no-glare surface where bright overhead lighting makes glossy finished films impossible to see.

Features and Benefits:
- Adds body to image to allow for easier handling and display
- Adds durability

Typical Uses:
- Rollable graphics
- Retail displays

Physical Properties	Typical Values
Thickness	**10-mil** (7/3)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL5151	51" x 250'	75
TL5153*	43" x 250'	65
TL5155	38" x 250'	56
TL5157*	33" x 250'	50

* Special Order sizes 15 day lead time

THERMACOLOR®

DIGITAL graphics · MATTE finish · UV · HEAT activated

Tip

Mactac thermal overlaminates are low temperature laminates and are safe to use on water-based ink jet images. When laminating a water-based ink jet image do not exceed 200°F.

It is important to make sure your image, water-based or other, is completely dry before using any laminate. It is especially important when thermal laminating. Mactac recommends allowing an image to dry for 24 hours prior to lamination.

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PERMACOLOR®

Thermal Overlaminates

THERMACOLOR®

DIGITAL graphics | TEXTURED finish | UV | HEAT activated

TL5300 ThermaFlex 10-mil **is a family of uniquely textured, clear PET films with a heat activated, polymeric adhesive on one side**. The use of ThermaFlex lends depth and vibrancy to underlying images, has built in scratch resistance and offers a no-glare surface where bright overhead lighting makes glossy finished films impossible to see.

Features and Benefits:
- Adds body to image for easy rolling and display
- Eliminates glare
- Provides protection against UV color fade, scratches and abrasions.

Typical Uses:
- Trade show displays
- P.O.P. displays
- Kiosks

Physical Properties	Typical Values
Thickness	**10-mil** (7.3)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**170°F** (77°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL5351	51" x 250'	75
TL5355	38" x 250'	56

THERMACOLOR®

DIGITAL graphics | TEXTURED finish | UV | HEAT activated

TL5400 ThermaFlex 5.0-mil **is a family of uniquely textured, clear PET films with a heat activated, polymeric adhesive on one side**. The use of ThermaFlex lends depth and vibrancy to underlying images, has built in scratch resistance and offers a no-glare surface where bright overhead lighting makes glossy finished films impossible to see.

Features and Benefits:
- Adds body to image for easy rolling and display
- Eliminates glare
- Provides protection against UV color fade, scratches and abrasions.

Typical Uses:
- Trade show displays
- P.O.P. displays
- Kiosks

Physical Properties	Typical Values
Thickness	**5-mil** (3/2)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL5451	51" x 250'	39
TL5455	38" x 250'	29

Tip

Mactac does not recommend using a thermal laminate on a pressure-sensitive backed media. The heat required to activate the laminate can distort the adhesive and turn it to mush.

If you choose to thermal laminate an image that will be mounted to a board using pressure-sensitive adhesive, Mactac recommends you first laminate the image with the thermal laminate. After cooling, apply the image to the board with a pressure-sensitive adhesive. This does require a three step process but will eliminate the need to redo the graphic completely.

PERMACOLOR®

TL8000 5.0-mil White Opaque Polyester is a bright white, opaque, glossy PET film with heat activated, polymeric adhesive on one side. TL8000 is

intended for back of graphic images, posters and other printed materials. The use of TL8000 enhances color density, lends depth and vibrancy and helps diffuse light in backlit applications.

THERMACOLOR®

DIGITAL graphics | opaque | HEAT activated

Features and Benefits:
- Gives opacity to the image
- Adds depth of color to the print

Typical Uses:
- Free hanging signage
- Posters
- Trade show graphics
- P.O.P displays

Physical Properties	Typical Values
Thickness	**5-mil** (1/4)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL8051	51" x 250'	36
TL8053*	43" x 250'	31
TL8055	38" x 250'	29
TL8057*	33" x 250'	24

TL8100 10-mil White Opaque Polyester is a bright white, opaque, glossy PET film with heat activated, polymeric adhesive on one side. TL8100 is

intended for back of graphic images, posters and other printed materials. The use of TL8100 enhances color density, lends depth and vibrancy and helps diffuse light in backlit applications.

THERMACOLOR®

DIGITAL graphics | opaque | HEAT activated

Features and Benefits:
- Gives opacity to the image
- Adds stiffness to improve handling

Typical Uses:
- Free hanging signage
- Posters
- Trade show graphics
- P.O.P displays

Physical Properties	Typical Values
Thickness	**10-mil** (7/3)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL8151	51" x 250'	75
TL8153*	43" x 250'	65
TL8155	38" x 250'	56
TL8157*	33" x 250'	50

TL8300 10-mil Light Block Polyester is a bright white, opaque, glossy PET film on one side, a thin layer of foil for 100% opacity in the middle and a heat activated, polymeric adhesive on the other side for adhesion to a wide variety of surfaces. Light Block

is intended for the back of graphic images, posters and other printed materials where 100% opacity is required. The use of Light Block also adds stiffness to the image.

THERMACOLOR®

DIGITAL graphics | opaque | HEAT activated

Features and Benefits:
- Completely blocks out light from back of image
- Provides body to final image

Typical Uses:
- Hanging signage
- Window signage
- P.O.P displays

Physical Properties	Typical Values
Thickness	**10-mil** (4.0/0.3/5.7)
Roll Wind	**Adhesive In**
Adhesive PH	**7.0**
Core Size	**3" I.D.**
Heat Seal Initiation Temperature	**180°F** (82°C)

Shelf Life:
Two years when stored at 75°F (24°C) and 50% relative humidity or less. Note: Mactac recommends the rolls be stored on end or suspended from the core.

Stock No.	Roll Width x Length	Weight: Pounds
TL8351	51" x 250'	75
TL8355	38" x 250'	56

* Special Order sizes 15 day lead time

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Multi-Print Media

REBEL® - versatility and value.

Need to do a large run, in a short time and you're watching the bottom line? Then you need **REBEL**, a full line of quality screen-printable media for a wide range of graphic applications. **REBEL** products are available in **roll** or **sheet** form with outdoor durability from 2, 4 & 5 years. From signage and vehicle graphics to POP, billboards, banners and more, **REBEL** can provide you with cost-effective, long lasting graphics.

REBEL™ MULTI-PRINT MEDIA — Digital & Screenprint Media

	Product	Description	Indoor Floor	P.O.P/ Indoor	Short-Term Graphics	Outdoor Signs
High-Performance Visit www. Mactac.com/Graphics for the most up-to-date product literature and technical assistance guides.	REBEL®RB528H	4.0-mil Matte, White		✓		✓
	REBEL RB528P	4.0-mil Matte, White				✓
	REBEL RB529P	4.0-mil Gloss, White				✓
	REBEL RB599H	4.0-mil Gloss, Clear		✓		✓
	REBEL RB599R	4.0-mil Gloss, Clear	✓	✓		✓
	REBEL RB528R	4.0-mil Matte, White	✓	✓		✓
	REBEL RB529R	4.0-mil Gloss, White	✓	✓		✓
Intermediate	REBEL RB428P	4.0-mil Matte, White		✓		✓
	REBEL RB429P	4.0-mil Gloss, White		✓		✓
Promotional	REBEL RB228P	3.4-mil Matte, White		✓	✓	✓
	REBEL RB228R	3.4-mil Matte, White	✓	✓	✓	✓

Features and Benefits:

- Vinyl opaque media in matte and gloss finishes
- Permanent and removable clear adhesives
- Removable adhesive is cleanly removable from a range of substrates
- Facestocks designed specifically for screen printing and digital printing
- Adhesive systems matched to a broad range of demanding applications
- Specially formulated liners for excellent layflat
- Warranted to work
- Compatible with wide-format solvent and eco-solvent, latex and UV inks, as well as solvent and UV screen inks

Indoor Promotional Signs	Tradeshows	Printed Labels	Decals	Bumper Stickers	Walls	Adhesive Liner / Durability
	✓		✓		✓	High-Tack, Permanent 90# Polycoated SuperFlat™ / 5 Years
✓		✓	✓			Permanent 90# Polycoated SuperFlat/ 5 Years
✓		✓	✓		✓	Permanent 90# Polycoated SuperFlat/ 5 Years
	✓		✓			High-Tack, Permanent 90# Polycoated SuperFlat/ 5 Years
✓		✓	✓			Removable 90# Polycoated SuperFlat/ 5 Years
✓		✓	✓			Removable 90# Polycoated SuperFlat/ 5 Years
✓		✓	✓			Removable 90# Polycoated SuperFlat/ 5 Years
✓	✓	✓	✓			Permanent 90# Polycoated SuperFlat/ 4 Years
✓	✓	✓	✓			Permanent 90# Polycoated SuperFlat/ 4 Years
✓	✓	✓	✓			Permanent 90# Layflat/ 2 Years
✓	✓	✓	✓	✓		Removable 90# Layflat/ 2 Years

Tips

During printing it is important to ensure removal of the printing ink solvent during the drying process. Certain solvents, if retained, can lead to plasticization problems resulting in subsequent application issues and poor weathering properties.

Where exposure to chemical and solvent spills are likely to occur, edge sealing of decals with a varnish or clear coat will prevent edge lift. Correct varnishing of decals gives greater protection and longer end-use life against prolonged weathering, abrasion and other erosive effects such as frequent cleaning.

REBEL®

High-Performance | Screen & Digital Print Media

5yr   **MATTE finish**   **HIGH GLOSS finish**   **Permanent**

Application: Indoor signage
Material: REBEL

RB528P/RB529P are high-performance Multi-Print Media 4.0-mil opaque matte or high-gloss white vinyl coated with a **permanent** acrylic pressure-sensitive adhesive. The 90# SuperFlat™ polycoated release liner provides exceptional lay flat stability. Opacity built into the facestock provides **99% opacity**, consistent printability, and a clear adhesive to obtain the best possible product durability and performance.

Features and Benefits:
- Wide-format and screen printable
- Five year outdoor durability
- True white matte face
- Strong permanent bond
- Resists creep, solvents and heat

Typical Uses:
- Screen print labels and OEM decals
- Point of purchase displays
- Outdoor signage

Physical Properties	Typical Values
Thickness	**.0042** (106)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**2.7** (12)
-24 hr	**3.5** (15)
-24 hr heat aged @158°F	**4.5** (20)
Quick Tack on SS, lb./in2 (N/25mm)	**1.7**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**.06/.04**
Temperature Ranges Application: **40° to 150°F** (-4°C to 65°C) End Use: **-75° to 200° F** (-59° to 94°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No. Matte	Stock No. High-Gloss	Roll Width x Length	Core	Weight: Pounds
RB528PW54L150	RB529PW54L150	54" x 150'	3"	43
RB528PW60L150	RB529PW60L150	60" x 150'	3"	47
RB528PW6*	RB529PW6*	54" x 300'	6"	92

Custom sizes available upon request.

5yr   **MATTE finish**   **HIGH GLOSS finish**   **Removable**

RB528R/529R are high-performance Multi-Print Media is a 4.0-mil opaque matte or high-gloss white vinyl coated with a **removable** acrylic pressure-sensitive adhesive. The 90# SuperFlat polycoated release liner provides exceptional lay flat stability. Opacity built into the facestock provides **99% opacity**, consistent printability, and a clear adhesive to obtain the best possible product durability and performance.

Features and Benefits:
- Wide-format and screen printable
- Five year outdoor durability
- True white matte face
- Lower initial tack
- Stronger removable bond

Typical Uses:
- Screen print labels and decals
- Floor, wall and window graphics
- P.O.P. displays
- Outdoor signage
- Indoor signage

Physical Properties	Typical Values
Thickness	**.0042** (106)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**2.0** (8.7)
-24 hr	**2.7** (12)
-1 wk heat aged @158°F	**3.0** (13)
Glass - 30 min.	**2.1** (9.2)
-24 hr	**2.0** (8.7)
-1 wk heat aged @158°F	**2.8** (12.2)
Quick Tack lb./in2 (N/25mm) Stainless Steel	**1.2** (5.2)
Glass	**1.2** (5.2)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**.06/.04**
Temperature Ranges Application: **32° to 150°F** (0°C to 65°C) End Use: **-75° to 200° F** (-59° to 94°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No. Matte	Stock No. High-Gloss	Roll Width x Length	Core	Weight: Pounds
RB528RW54L150	RB529RW54L150	54" x 150'	3"	43
RB528RW60L150	RB529RW60L150	60" x 150'	3"	47
RB528RW6*	RB529RW6*	54" x 300'	6"	92

Custom sizes available upon request.

* Special roll size for drum-type printers

RB528H High-performance Multi-Print Media is a 4.0-mil opaque matte white vinyl coated with a high-tack permanent acrylic pressure-sensitive adhesive. The 90# SuperFlat™ polycoated release liner provides exceptional lay flat stability. Opacity built into the facestock provides **99% opacity**, consistent printability, and a clear adhesive to obtain the best possible product durability and performance.

5yr MATTE finish opaque HIGH TACK

Application: outdoor signage
Material: REBEL

Features and Benefits:
- Wide-format and screen printable
- 100% opacity
- Five year outdoor durability
- True white matte face
- High-tack permanent bond
- Resists creep, solvents and heat

Typical Uses:
- Low surface energy applications
- Gator®, Sintra®, Primed MDO
- OEM decals
- Permanent wall murals
- P.O.P. displays
- Intermediate outdoor signage
- Long-term indoor signage

Physical Properties	Typical Values
Thickness	**.0045** (144)
Peel Adhesion, lb/in. (N/25 mm)	
Stainless Steel - 30 min.	**4.4** (19)
-24 hr	**6.0** (26)
-24 hr heat aged @158°F	**7.2** (32)
-72 hr	**7.0** (31)
-72 hr aluminum	**8.8** (39)
-72 hr Powder coated paint	**4.5** (20)
Quick Tack on SS, lb./in2 (N/25mm)	**3.5** (15.3)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**.06/.04**
Temperature Ranges Application: **40° to 150°F** (-4°C to 65°C) End Use: **-75° to 200° F** (-59° to 94°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Core	Weight: Pounds
RB528HW54L150	54" x 150'	3"	54
RB528HW60L150	60" x 150'	3"	47
RB528HW60L300	60" x 300'	3"	
RB528HW6*	54" x 300'	6"	92

Custom sizes available upon request.

RB599H High-performance multi-print media is a 4.0-mil high-gloss clear flexible vinyl coated with a high-tack permanent acrylic adhesive. The 90# SuperFlat polycoated liner provided exceptional moisture stability regardless of print method. RB599H can be solvent, eco-solvent, and UV wide-format ink jet printed, as well as screen printed.

5yr HIGH GLOSS finish CLEAR HIGH TACK

Application: Indoor signage
Material: REBEL

Features and Benefits:
- Wide-format and screen printable
- Up to five year outdoor durability
- High-tack for hard-to-stick-to materials

Typical Uses:
- Low surface energy applications
- Gator, Sintra, Primed MDO
- OEM decals
- POP displays
- Medium to long-term outdoor

Physical Properties	Typical Values
Thickness	**.0045** (144)
Peel Adhesion, lb/in. (N/25 mm)	
Stainless Steel - 30 min.	**4.4** (19)
-24 hr	**6.0** (26)
-24 hr heat aged @158°F	**7.2** (32)
-72 hr	**7.0** (31)
-72 hr aluminum	**8.8** (39)
-72 hr Powder coated paint	**4.5** (20)
Quick Tack on SS, lb./in2 (N/25mm)	**3.5** (15.3)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**.06/.04**
Temperature Ranges Application: **40° to 150°F** (-4°C to 65°C) End Use: **-75° to 200° F** (-59° to 94°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Core	Weight: Pounds
RB599HW54L150	54" x 150'	3"	43
RB599HW54L300	54" x 300'	3"	92
RB599HW546	54" x 300'	6"	92

Custom sizes available upon request.

* Special roll size for drum-type printers

High-Performance | Screen & Digital Print Media

5 yr **GLOSS finish** **CLEAR** **Removable**

Application: Indoor signage
Material: REBEL®

RB599R High-performance Multi-Print Media is a 4.0-mil clear high-gloss vinyl coated with a removable acrylic pressure-sensitive adhesive. The 90# SuperFlat™ polycoated release liner provides exceptional lay flat stability. Eco-solvent, solvent and UV screen-printable.

Features and Benefits:
- Wide-format and screen printable
- Five year durability
- Two year removability
- High-gloss face
- Lower initial tack
- Stronger removable bond

Typical Uses:
- Screen print labels and decals
- Window graphics
- P.O.P. displays
- Intermediate outdoor signage
- Intermediate indoor signage

Physical Properties	Typical Values
Thickness	**.0042** (1.6)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**1.7** (7.5)
-24 hr	**2.2** (9.6)
Quick Tack on SS, lb./in2 (N/25mm)	**1.5** (6.5)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**.06/.04**
Temperature Ranges Application: **32° to 150°F** (0°C to 65°C) End Use: **-40° to 200° F** (-5° to 94°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Core	Weight: Pounds
RB599RW60L150	60" x 150'	3"	52
RB599RW54L150	54" x 150'	3"	46
RB599RW6*	54" x 300'	6"	92

Custom sizes available upon request.

Intermediate | Screen & Digital Print Media

4 yr **MATTE finish** **GLOSS finish** **Permanent**

RB428P/RB429P are 4-mil soft; non-top coated, opaque matte/gloss white vinyl coated with an acrylic permanent adhesive. The liner is a 90# SuperFlat™, C2S polycoated that provides excellent lay flat. Designed for moderate-term screen and digitally printed graphic applications, indoor and out. The adhesive has a moderate initial tack and builds to a strong permanent bond with good resistance to creep, solvents and heat.

Features and Benefits:
- Wide-format and screen printable
- Four year outdoor durability
- True white matte face
- Strong permanent bond
- Resists creep, solvents and heat

Typical Uses:
- Screen print labels and OEM decals
- Point of purchase displays
- Intermediate outdoor signage
- Long-term indoor signage

Physical Properties	Typical Values
Thickness - Face plus adhesive Face, adhesive & liner	**.004** (157) **.011** (279)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**2.7** (12)
-24 hr	**3.2** (14)
-24 hr heat aged @158°F	**4.0** (18)
Quick Tack on SS, lb./in2 (N/25mm)	**1.5**
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	**0.1/0.1**
Temperature Ranges Application: **50°F min.** (10°C) End Use: **-40° to 200° F** (-40° to 93°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No. Matte	Stock No. Gloss	Roll Width x Length	Core	Weight: Pounds
RB428PW60L150	RB429PW60L150	60" x 150'	3"	52
RB428PW6*	RB429PW6*	54" x 300'	6"	92
RB428PW54L150	RB429PW54L150	54" x 150'	3"	46

Custom sizes available upon request.

REBEL®

NEW!

RB228P is a 3.4-mil soft; non-top coated, matte white flexible vinyl coated with an acrylic permanent adhesive. The liner is a 90# C2S polycoated that provides excellent lay flat. Designed for promotional screen and digitally printed graphic applications, indoor and out. The adhesive has a good initial tack and builds to a strong permanent bond with good resistance to creep, solvents and heat.

RB228P uses include digital and screen-printed promotional labels, decals, markings, bumper stickers, POP displays and signs for short-term indoor and outdoor use.

Features and Benefits:
- Wide-format and screen printable
- Two year durability
- Matte face

Typical Uses:
- Screen print labels and decals
- Promotional indoor/outdoor graphics
- P.O.P. displays

Physical Properties	Typical Values
Thickness Face plus adhesive Face, adhesive & liner	 **.0042** (106) **.0112** (284)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. -24 hr	 **3.0** (13) **4.5** (20)
Quick Tack on SS, lb./in2 (N/25mm)	**2.0** (8.7)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	 **.2/.2**
Temperature Ranges Application: **50°F** (10°C) End Use: **-40° to 180° F** (-5° to 82°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Core	Weight: Pounds
RB228PW54L150	54" x 150'	3"	45

Custom sizes available upon request.

2yr | **MATTE finish** | **DIGITAL graphics** | **Permanent**

NEW!

RB228R is a 3.4-mil soft; non-top coated, matte white flexible vinyl coated with an acrylic removable adhesive. The liner is a 90# C2S polycoated that provides excellent lay flat. Designed for promotional screen and digitally printed graphic applications, indoor and out. The adhesive has a good initial tack and builds to a strong removable bond with good resistance to creep, solvents and heat.

RB228R uses include digital and screen-printed promotional labels, decals, markings, bumper stickers, POP displays and signs for temporary indoor and outdoor use.

Features and Benefits:
- Wide-format and screen printable
- Two year durability
- Six months to one year removability
- Matte face
- Stronger removable bond

Typical Uses:
- Screen print labels and decals
- Promotional indoor/outdoor graphics
- P.O.P. displays

Physical Properties	Typical Values
Thickness Face plus adhesive Face, adhesive & liner	 **.004** (102) **.011** (279)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. -24 hr	 **2.2** (9.6) **2.8** (12)
Quick Tack on SS, lb./in2 (N/25mm)	**2.0** (8.7)
Dimensional Stability (shrinkage), % 48 hours @ 158°F (70°C) MC / CD	 **.2/.2**
Temperature Ranges Application: **50°F** (10°C) End Use: **-40° to 180° F** (-5° to 82°C)	
Shelf Life: Two years from D.O.M when stored at 60/77°F (15-25°C) and 50% relative humidity in the original packaging.	

Stock No.	Roll Width x Length	Core	Weight: Pounds
RB228RW54L150	54" x 150'	3"	45

Custom sizes available upon request.

2yr | **MATTE finish** | **DIGITAL graphics** | **Removable**

Technical Guides	Description
Open-Image Warranty™	Mactac's way of keeping warranty matters simple. We understand you have a large number of options available for making graphics for an ever expanding variety of applications. When it comes to making graphics with Mactac's media you are covered.
TA2010 Cutting PermaFlex®	Trimming PermaFlex® laminated images.
TA2017 Material Safety Data Sheets	MSDS Sheets for Mactac Products.
TA2032 General Surface Preparation	Surface preparation is a critical step towards successful vinyl graphic installations. This Technical Assistance Guide provides the proper procedures for cleaning and preparing various surfaces for optimized pressure-sensitive graphic applications.
TA2034 Vinyl Graphics Removal	Most vinyl graphic challenges center on application and adhesion. However, there comes a time when vinyl graphic has outlived its purpose and must be removed. This Guide contains the steps to lead you through the removal process.
TA2037 Rolling and Shipping Graphics	Mactac studies and field surveys with numerous customers using PERMACOLOR laminates in Roll Label Graphic applications, leads Mactac to make recommendations for rolling and shipping laminated images.
TA2040 How to make Floor Graphics	The Mactac Floor Graphic System consists of performance-matched overlaminates and base films for all printing methods, as well as installation assistance. Simply answering the questions in this guide will help you select the right components for your floor graphic application and ensure a successful installation.
TA2041 Archivability	Archival or permanent pressure-sensitive paper products
TA2044 Lamination Procedures	PERMACOLOR provides fast, efficient processing through cold roll lamination techniques without the need for heat, drying or messy liquid coating operations.
TA2063 Cleaning PERMACOLOR® Laminated Images	Mactac product recommendations for CBS Outdoors.
TA2076 Outgassing Prevention	Plastic sheet pre-treatment for the reduction or elimination of out-gassing.
TA2100 Digital Printing 101	No matter what type of digital printer you have there are some basic steps to follow that will insure a quality print for every job.
TA2101 Wrap Care	Follow these recommendations made by industry experts to keep your wrap in excellent condition.
TA2102 IMAGin® RoughRap™ Installation Guide	Learn the proper way to install graphics to rough or textured surfaces to create an outstanding visual display.
TA2103 B•free® Watercraft Graphics Installation Guide	Learn the proper techniques for installing marine graphics that will last using B-free™ digital media.
TA2104 MACmark® 8900 Series Application Guide	MACal® 8900Pro is a unique intermediate film with up to 4 years outdoor life. The product can be applied at temperatures down to 32° and can be cleanly removed for up to 2 years when you follow the directions in the PDF to the left.
TA2105 Application Checklist	Mactac's new application checklists helps you make sure you cross all the T's and dot all the I's before beginning your project.
TA2106 IMAGin Deco Application Guide	Step by step directions for installing IMAGin Deco pressure-sensitive top-coated fabric for all mural applications.
TA2500 Graphics Application to Drywall	Pressure-sensitive graphics in drywall applications are difficult at best for a range of reasons. In this Technical Assistance Guide, we give recommendations for the best chance of success.
TA2501 B•free Application Guide	Our micro-structured air-egress technology provides the best opportunity for a successful application!

Guide #	Description	Guide #	Description
MAC1766	MACmark Cut Vinyl Application Guide	**MAC2808**	IMAGin Wide-Format Media Quick Reference Poster
MAC2597	MACmark® Marking Films Product Guide	**MAC2809**	MACmark Window Films
MAC2685	IMAGin® Digital Media Product Guide	**MAC2631**	MACmark Colors Poster
MAC2703	REBEL® Product Guide	**MAC2830**	PERMACOLOR Mounting Films Product Guide
MAC2705	PERMACOLOR® Product Guide	**MAC2831**	wallNOODLE/ROODLE Product Guide
MAC2708	PERMACOLOR Floor Graphics Product Guide	**MAC2842**	Window Graphics Guide
MAC2719	B•free® Digital Media Product Guide	**MAC2897**	Marine Product Guide
MAC2805	Wall Graphics Media Product Guide		

DesignScape3D™

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Most complete App on the market.
Visit the iTunes Store today to download your copy!

MACmark® changes graphics from ordinary to extraordinary!

Build your business and your reputation with the complete line of **MACmark** vinyl marking films.

The **MACmark** line features a broad spectrum of colored, textured and special effect films for cut vinyl applications that range from short-term signage to long-term fleet graphics. **MACmark** vinyls exhibit excellent conformability and adhesion to difficult surfaces and can withstand high temperatures.

Application: Storefront Advertising
Material: MACmark

Application: Vehicle Graphics
Material: MACmark 9800

MACmark films are offered in the following categories:

- Cast High-Performance
- Calendered High-Performance
- Translucent High-Performance
- Intermediate
- Specialty

Features and Benefits:

- Thermal transfer printable
- A wide variety of high-performance opaque and metallic colors
- Highly conformable over rivets, curves, and corrugations
- Superior cutting and weeding properties
- Industry's highest gloss level
- Contrast liners for easy weeding of white films
- Long-term color and gloss durability
- Warranted to work
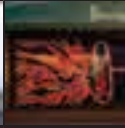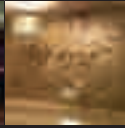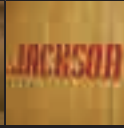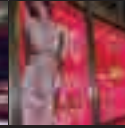
MACmark®

Superior cutting and weeding properties.
Contrast liners for easy and quick weeding.

Product	Outdoor Durability	Thickness	Colors	Characteristics	Long-term Outdoor Advertising	Fleet Marking / Vehicle Markings / Decals & Striping	Full Vehicle Wraps
High-Performance Marking Films							
6600	Up to 8 years	2.0-Mil	63 Gloss 22 Metallic 2 Matte	• Polymeric cast opaque vinyl • Permanent clear solvent acrylic adhesive • 78# bleached white Kraft liner: stability and layflat	✓	✓	✓
9800PRO	Up to 7-8 years	2.8-Mil	50 Gloss 6 Luminous 2 Matte	• Polymeric calendered vinyl alternative to cast • Permanent solvent acrylic adhesive • 83# bleached white Kraft liner: stability and layflat	✓	✓	
9700PRO	Up to 5-7 years	3.1-Mil	34 Matte	• Polymeric calendared translucent vinyl • Consistent day/night color • Permanent solvent acrylic adhesive • 83# bleached white Kraft line: stability and layflat	✓		
TuningFilms Carbon Fiber BF	Up to 5 years	6.9-Mil	5 Colors	• Trendy carbon fiber texture • B•free® air-egress permanent acrylic adhesive • 80# polycoated layflat liner: stability and layflat	✓	✓	
TuningFilms Iridescent	Up to 3-5 years	2.4-Mil	3 Colors and finishes	• Ultra conformable cast vinyl that changes colors • Low tack high-performance acrylic adhesive • 78# bleached white Kraft liner for stability and layflat	✓	✓	✓
TuningFilms Textured	Up to 5 years	8.7-Mil	2 Colors/ Finishes	• Soft structured cast vinyl in black leather or silver moon finishes • Low tack high-performance acrylic adhesive • 83# bleached white Kraft liner for stability and layflat	✓	✓	
TuningFilms Metal BF	Up to 5 years	5.5-Mil	5 Colors/ Finishes	• Embossed polymeric vinyl looks like metal • Permanent acrylic adhesive • 90# polycoated layflat liner		✓	
TuningFilms Sublime BF	Up to 7-8 years	3.9-Mil	15 Matte 15 Gloss	• Polymeric calendared vinyl changes vehicle color • B•free air-egress permanent acrylic adhesive • 83# bleached white Kraft liner for stability and layflat	✓	✓	✓
TuningFilms 800 BF Stellar	Up to 5 years	4.7-Mil	8 Gloss	• Sparkling double layer cast vinyl • B•free air-egress permanent acrylic adhesive • 90# polycoated layflat liner		✓	✓
Intermediate Marking Films							
8900PRO	Up to 4 years outdoor; 5 years indoor	2.8-Mil	54 Matte 2 Gloss	• Calendared vinyl • Adhesive removes cleanly up to 2 years from most surfaces • 83# bleached white Kraft liner: stability and layflat			
8300PRO	Up to 4-5 years	2.8-Mil	51 Gloss 2 Matte	• Highest gloss in the industry • Permanent solvent acrylic adhesive • 83# bleached white Kraft liner for stability and layflat		✓	
700 Décor	Up to 5 years	3.0-Mil	5 Matte Colors 2 Matte Finishes	• Polymeric translucent color vinyl • Consistent day/night color • Permanent transparent solvent acrylic adhesive • 83# bleached white Kraft liner: stability and layflat			
MACcrystal® 8400	Up to 3 years	3.1-Mil	17 Gloss	• Glossy translucent vinyl with color uniformity • Permanent transparent acrylic adhesive • 83# bleached white Kraft liner: stability and layflat			
Specialty Films							
5700	5-7 Years	6.0-Mil	7 Colors	• Reflective polymeric film with excellent night and day visibility • White high strength permanent acrylic adhesive • 92# White polycoated lay flat liner	✓	✓	
6400	5 Years	2.0-Mil	14 Lustre	• Polymeric iridescent cast vinyl • Ultra conformability on complex curves • Permanent solvent acrylic adhesive		✓	✓
6700	5 Years	3.0-Mil	15 Sparkle	• Polymeric sparkle metallic cast vinyl • Ultra conformability on complex curves • Permanent solvent acrylic adhesive	✓	✓	
6800	Up to 6 months	2.3-Mil	6 Fluorescent	• Eye catching color polymeric cast vinyl • Permanent solvent acrylic adhesive • 78# Bleached white Kraft liner: stability and layflat			
wallCHALKER™	Up to 4 Years	4.7-Mil	True Black	• Semi-rigid chalkable vinyl • Aggressive removable adhesive removes cleanly up to 2 years from most surfaces • 83# Kraft Layflat liner	✓		

Recommended Application Tapes: MACtransfer 210 with medium tack adhesive for medium to large decals and MACtransfer 220 with high-tack adhesive for small letter and fine lines.

Marine Markings	Interior Glass Partitions & Windows	Exterior Windows	Wall Design	Wall Words	Logo & Signs	Backlit Signs	Awnings	POP Promotional Signage	Banners	Additional Applications	Flat or Curved	Complex Curves	Rivets
✓		✓			✓						✓	✓	✓
✓		✓	✓		✓			✓			✓		✓
	✓	✓				✓	✓			• Thermoforming	✓		
✓					✓			✓		• Electronics • Vehicle Interiors	✓		
✓			✓		✓			✓	✓	• Electronics • Vehicle Interiors • Décor	✓	✓	✓
✓			✓		✓			✓	✓	• Racing Stripes • Electronics • Vehicle Interiors	✓		
✓		✓			✓			✓		• Racing Stripes • Electronics • Vehicle Interiors	✓		
✓					✓			✓		• Racing Stripes	✓		
✓					✓			✓		• Racing Stripes	✓	✓	✓
	✓		✓	✓	✓			✓		• Indoor Floor Graphics*	✓		
	✓	✓	✓	✓	✓			✓ Flat Surfaces	✓	• Display Graphics • Floor Graphics*	✓		
	✓	✓						✓		• Privacy Accents	✓		
	✓	✓			✓						✓		
✓			✓		✓			✓			✓	✓	✓
✓					✓			✓			✓	✓	✓
✓					✓			✓			✓	✓	
	✓				✓	✓		✓			✓	✓	✓
			✓		✓			✓		• Table tops and other flat surfaces	✓		

* For correct ASTM C-1028 Laminate see MAC2705 PERMACOLOR® Floor Guide

MACmark®

High-Performance | Marking Films

6600 Cast Vinyl is our **most durable** and **conformable** color vinyl for complex surfaces like **rivets**, **corrugations** and other **irregular applications**. Engineered for long-term outdoor signage, fleet and vehicles with complex curves. Rich gloss colors and matte white and black.

Application: Vehicle Graphics
Material: MACmark®

Application: Fleet Graphics
Material: MACmark

Features and Benefits:

- Excellent conformability to corrugated and riveted surfaces
- Up to 10 years outdoor durability, five years for metallic colors
- Superior cutting and weeding
- High-performance 2.0-mil cast vinyl
- Clear high-performance solvent acrylic adhesive
- 78# Bleached white Kraft liner for stability and layflat

Typical Uses:

- Full vehicle wrap
- Fleet marking with rivets and irregular surfaces
- Watercraft (Above waterline, 1 year durability)
- Long-term outdoor advertising
- Decorative panels
- Logos and signs
- Exterior window graphics

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0032** (81)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.2**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr	**4.0** (17) **5.0** (22)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m) Elongation %	**>9.5** (0.97) **>100%**
Temperature Ranges Application: **40° to 104°F** (5° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 150'	42

Matte White **6628-00**	Brick Red Metallic **6659-28**	Banana Yellow **6609-09**	Medium Red **6659-00**
Matte Black **6688-00**	Silver Metallic **6669-00**	Dark Yellow **6609-10**	Cardinal Red **6659-01**
Gloss White **6629-00**	Smoke Metallic **6669-01**	Imitation Gold **6609-20**	Tomato Red **6659-04**
Gloss Black **6689-00**	Charcoal Metallic **6669-02**	Oyster **6629-03**	Burgundy **6659-14**
Powder Blue Metallic **6639-02**	Dark Charcoal Metallic **6669-04**	Intense Blue **6639-04**	Regal Red **6659-16**
Demin Blue Metallic **6639-08**	Gold Metallic **6679-00**	Peacock Blue **6639-07**	Brown **6683-03**
Ice Blue Metallic **6639-18**	Bright Gold Metallic **6679-01**	Olympic Blue **6639-10**	Light Gray **6689-03**
Sapphire Blue Metallic **6639-20**	Light Gold Metallic **6679-03**	Vivid Blue **6639-11**	Pewter **6689-04**
Pine Green Metallic **6649-10**	Gingersnap Metallic **6683-05**	Violet **6639-13**	Traffic Gray **6689-05**
Medium Green Metallic **6649-14**	Bronze Metallic **6683-06**	Light Navy **6639-23**	Gray **6689-02**
Celery Green Metallic **6649-18**	Taupe Metallic **6683-11**	Sapphire Blue **6639-25**	Palm Oyster **6689-07**
Dark Teal Metallic **6649-26**	Black Metallic **6689-01**	Dark Green **6649-00**	
Fire Red Metallic **6659-18**	Clear **6699-00**	Deep Green **6649-02**	
Shocking Pink Metallic **6659-21**	Bright Orange **6601-05**	Bright Green **6649-08**	

Note: Colors shown may vary due the printing process. **Call for a 6600 Series Color Card (MAC2758) for actual colors.**

6600 Custom Color Match Program

How to request a custom color match:

- Ask Mactac® sales rep to complete form
- Send in the form along with your color sample or PMS color match.
- Mactac will match the color and send you a custom sample, along with an approval form.

How to place a custom color order:

- Sign the custom color approval form and return as directed, with the custom sample.
- Provide a purchase order (6000 sq. ft. minimum order).
- Provide a forecast for future order quantities.

Features and benefits:

- Infinite amount of colors
- Choice of gloss, matte and metallic finishes for vivid colors and contrasts
- Mactac performance Open-Image Warranty™
- 6000 sq. ft. minimum
- Color match returned within 10 days for customer approval
- Only two weeks to manufacture color after approval
- Available up to 60" wide
- Up to 10 years outdoor durability, five years - metallics
- Top quality adhesive performance
- Less shrinkage than industry standard

Application: Fleet Graphics
Material: MACmark®

6600 Special Order Colors

Orange **6601-04**	Plum **6639-16**	Real Teal **6649-15**	Orchid **6659-08**
Tangerine **6601-06**	Dark Blue **6639-19**	Seafoam Green **6649-16**	Blossom **6659-09**
Yellow **6609-00**	Scandinavian Blue **6639-21**	Teal **6649-17**	Warm Red **6659-10**
Butter **6609-05**	Dark Navy Blue **6639-28**	Spectra Everglade **6649-19**	Vivid Red **6659-11**
Almond **6629-04**	Polo Green **6649-01**	Medieval Wine **6659-02**	Spectra Red **6659-12**
Nautical Blue **6639-00**	Shamrock Green **6649-05**	New Tomato Red **6659-03**	Cocoa **6683-04**
Spring Blue **6639-05**	Lime Green **6649-07**	Burgundy Maroon **6659-05**	Buckskin **6683-09**
Lavender **6639-14**	Kelly Green **6649-09**	Fire Red **6659-06**	
Shadow Blue **6639-15**	Apple Green **6649-12**	Raspberry **6659-07**	

Note: Colors shown may vary due the printing process. **Call for a 6600 Series Color Card (MAC2758) for actual colors.**

MACmark®

Customer Service **800-321-8834** | Inside Sales **866-622-8223** | Mactac.com/Graphics
@Mactac_Graphics | Mactac.NAmerica

High-Performance | Marking Films

8 yr | **GLOSS finish** | **CURVED surface** | **Permanent**

Application: Fleet Markings
Material: MACmark® 9800PRO

Recommended Application Tapes:
- MACtransfer® 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

9800PRO and **9800PRO-SL** are high-performance polymeric vinyls used for most of the same applications as cast vinyl at a much more competitive cost. Available in super high gloss colors as well as matte white and black

Features and Benefits:
- Significant cost savings over cast vinyl
- Up to seven years outdoor durability, eight years for black and white and five years for metallic colors
- Superior thermal transfer surface
- Superior cutting and weeding
- Exceptional high-gloss 2.6-mil cadmium-free calendared vinyl
- High-performance adhesives
- 83# Bleached white Kraft liner for stability and layflat

Typical Uses:
- Long-term outdoor advertising
- Fleet marking over simple curves, rivets and corrugations
- Watercraft
- Window graphics
- Decorative panels
- Logos and signs

Physical Properties		Typical Values
Thickness, inches (µm) Film plus adhesive		**0.0039** (100)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum		**<0.1**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel	- 20 min. - 1 week	**4.0** (16) **4.6** (20)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m) Elongation %		**>9.8** (27) **>150%**
Temperature Ranges Application: End Use:		**45° to 104°F** (8° to 40°C) **-40° to 194° F** (-40° to 90°C)
Flammability, Self-extinguishing Sample mounted on aluminum		ISO 3795
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.		

Stock No.	Roll Width x Length	Weight: Pounds
CS - punched	15" x 164'	14
CE	15" x 164'	14
CR	24" x 164'	21
CF	30" x 150'	28
CJ - punched	30" x 164'	28
CV	48" x 164'	42
CY	60" x 164'	53

9800PRO-SL
Luminous

Color	No.
Luminous Yellow	9807-00
Luminous Orange	9807-07
Luminous Cyan	9837-00
Luminous Blue	9837-01
Luminous Green	9847-00
Luminous Red	9857-00

9800PRO

Color	No.
Gloss White	9829-00
Gloss Black	9889-00
Matte White	9828-00
Matte Black	9888-00
Clear	9899-00
Orange	9801-40
Dark Yellow	9809-45
Lemon Yellow	9809-06
Banana Yellow	9809-46
Orange Yellow	9809-47
Saffron	9809-11

Color	No.
Beige	9829-01
Ivory	9829-05
Light Blue	9839-07
Sky Blue	9839-10
Vivid Blue	9839-11
Ultramarine Blue	9839-12
Violet	9839-13
Dark Blue	9839-19
Pastel Blue	9839-20
Sea Blue	9839-22
Scandinavian Blue	9839-23

Color	No.
Medium Blue	9839-24
Reflex Blue	9839-26
Dark Green	9849-51
Medium Green	9849-10
Light Green	9849-52
Apple Green	9849-13
Bottle Green	9849-21
Medium Red	9859-00
Tomato Red	9859-46
Burgundy	9859-05

Color	No.
Vivid Red	9859-47
Dark Red	9859-12
Wine Red	9859-41
Regal Red	9859-42
Silver	9869-00
Gold	9879-00
Dark Brown	9883-04
Charcoal	9889-01
Light Gray	9889-03
Pearl Gray	9889-04

Special Order

Color	No.
Grass Green	9849-55
Turquoise Green	9849-15
Petrol	9849-17
Panther Rose	9859-08
Cyclamen	9859-09
Poppy Red	9859-10
Fushia	9859-15
Fawn Brown	9883-06
Clay Brown	9883-07
Dark Gray	9889-02
Traffic Gray	9889-05

Note: Colors shown shown may vary due the printing process. **Call for a 9800PRO Series Color Card (MAC2760) for actual colors**.

9700PRO is a high-performance matte **translucent** vinyl for backlit signs exhibiting ultimate color consistency and excellent wet out characteristics for superior clarity. Can be thermal formed.

7yr | **MATTE finish** | **CURVED surface** | **Permanent**

Features and Benefits:
- Ultimate color consistency and uniformity
- Bright, vibrant colors
- Used in creating thermal formed signs
- 5-7 Years outdoor and indoor durability
- Superior cutting and weeding
- 3.0-mil cadmium-free vinyl
- Durable permanent adhesive with excellent wet-out for superior clarity
- 83# Bleached white Kraft liner for stability and layflat

Typical Uses:
- Backlit signs
- Awnings
- Windows

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0045** (115)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.02**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 20 min.	**4.6** (20)
- 1 week	**5.5** (24)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m)	**>10** (28)
Elongation %	**>180%**
Temperature Ranges Application:	**50° to 104°F** (10° to 40°C)
End Use:	**-40° to 194° F** (-40° to 90°C)
Flammability, Self-extinguishing	ISO 3795
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Application: Backlit Sign
Material: MACmark® 9700PRO

Recommended Application Tapes:
- MACtransfer® 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

Note: Colors shown may vary due to catalog printing process. **Call for a 9700PRO Color Card (MAC2762) for actual color swatches.**

Stock No.	Roll Width x Length	Weight: Pounds
CR	24" x 164'	21
CV	48" x 164'	42

Orange **9702-06**
Yellow **9708-07**
Signal Yellow **9708-02**
Sunflower **9708-03**
White **9728-00**

Blue **9738-00**
Signal Blue **9738-01**
Night Blue **9738-02**
Ultramarine Blue **9738-03**
Light Blue **9738-04**

Caribbean Blue **9738-05**
Sea Blue **9738-06**
Sultan Blue **9738-07**
European Blue **9738-08**

Green **9748-00**
Mint Green **9748-01**
Bottle Green **9748-04**
Red **9758-00**

Burgundy **9758-02**
Poppy Red **9758-04**
Vermillion Red **9758-05**
Tomato Red **9758-06**

Silver **9768-00**
Gold **9778-00**
Black **9788-00**
Gray **9788-01**

Special Order

Lemon Yellow **9708-01**
Yellow Green **9748-02**
Turquoise **9748-03**
Vivid Red **9758-01**
Cyclamen **9758-03**

9700PRO Light Diffusers and Light Stop can be used with translucent 9700PRO to give a more homogenous light diffusion from the light box applications. They modify the "night" colors of the 9700 creating different shades of color for nighttime illumination. Available in 30% and 60% diffusion levels. Light Stop's 100% opacity stops the light from passing through and allows special day/night effects when the box is lit.

Features and Benefits:
- 30% Diffuser 70% opacity
- 60% Diffuser 40% opacity
- Light Stop 100% opacity

7yr | **CURVED surface** | **Permanent**

Stock No.	Roll Width x Length	Weight: Pounds
CR	24" x 164'	21
CV	48" x 164'	42

Physical Properties	Typical Values Light Diffusers	Typical Values Pro Light Stop
Opacity, % TAPPI-425	**9798-30PRO** 30% **9798-60PRO** 60%	
		9722-00PRO 100%
Thickness, inches (µm) Film plus adhesive	**.0045** (115)	**.0069** (175)
Dimensional Stability (shrinkage) inches (mm) 48hours@ 158°F (70°C) bonded to aluminum	**<0.02** (.508)	
Peel Adhesion lb./in.(N/25mm) Stainless Steel	**30 Min - 3.5** (16) **1 Week - 4.5** (20)	
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)		
Flammability, Self-extinguishing ISO 3795		
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.		

mactac®

MACmark®

High-Performance | Marking Films

TuningFilm 700BF Sublime is a polymeric vinyl, available in **matte** and **ultra gloss** finishes. The **B•free® air-egress adhesive** is a high-performance, micro-structured permanent, acrylic adhesive for easy bubble-free application. Outdoor durability is up to eight years

Application: Vehicle Wrap
Material: MACmark® TuningFilm 700BF Sublime

Application: Vehicle Wrap
Material: MACmark TuningFilm 700BF Vivid Blue Sublime

Features and Benefits:
- Transform color of vehicles
- B•free air-egress adhesive for quick and quick bubble-free installation
- Exterior color decoration
- Matte and ultra high-gloss finishes
- Matte finish provide good scratch resistance
- Highly conformable
- Up to 7-8 years outdoor durability
- 3.9-mil cadmium-free polymeric vinyl film
- 83# Bleached white Kraft liner for stability and layflat

Typical Uses:
- Designed for full and partial vehicle wraps
- Customized vehicle wraps
- Racing and rally stripes

Physical Properties	Typical Values
Thickness, inches (µm)	
Film only	**0.0334** (85)
Film plus adhesive	**0.0453** (115)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.02**
Peel Adhesion, lb/in. (N/25 mm)	
180°F Stainless Steel - 20 min.	**3.7** (16)
- 24 hr	**4.1** (18)
- 1 week	**4.6** (20)
Face Material Data,68°F (20°C)	
Tensile strength lb/in. (Nk/m)	**≥ 9** (29)
Elongation %	**≥ 150%**
Temperature Ranges	
Application: **60° to 104°F** (15° to 40°C)	
End Use: **-40° to 194° F** (-40° to 90°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Color	Roll Width x Length	Weight: Pounds
TF	All Colors	60" x 82'	26

White Gloss **TF72900BF**

Banana Yellow Gloss **TF70946BF**

Medium Red Gloss **TF75900BF**

Scandinavian Blue Gloss **TF73923BF**

Silver Gloss **TF76900BF**

Black Gloss **TF78900BF**

White Matte **TF72800BF**

Flash Orange Matte **TF70948BF**

Medium Red Matte **TF75800BF**

Spicy Red Matte **TF75843BF**

Cyclamen Matte **TF75809BF**

Vivid Blue Matte **TF73811BF**

Ultramarine Blue Matte **TF73812BF**

Apple Green Matte **TF74813BF**

Charcoal Matte **TF78801BF**

Black Matte **TF78800BF**

Special Order

Banana Yellow Matte **TF70846BF**

Scandinavian Blue Matte **TF73823BF**

Aubergine Matte **TF73838BF**

Green Yellow Matte **TF74854BF**

Silver Matte **TF76800BF**

Flash Orange Gloss **TF70935BF**

Spicy Red Gloss **TF75943BF**

Cyclamen Gloss **TF75909BF**

Special Order

Vivid Blue Gloss **TF73911BF**

Ultramarine Blue Gloss **TF73912BF**

Aubergine Gloss **TF73938BF**

Green Yellow Gloss **TF74954BF**

Apple Green Gloss **TF74913BF**

Charcoal Gloss **TF78901BF**

MACmark®

TuningFilm Carbon BF is a **3D textured carbon fiber** embossed vinyl, available in five colors. The **B•free® air-egress adhesive** is a high-performance, micro-structured permanent, acrylic adhesive for easy bubble-free application. Can be applied over **rivets**.

Features and Benefits:
- Realistic carbon fiber effect on any smooth curved or flat surface
- Applies over rivets
- Resistant to most oils, grease, fuel, salts
- Up to five years outdoor durability
- 5.1-mil textured cadmium free polymeric vinyl
- B•free air-egress adhesive for quick and quick bubble-free installation
- 80# Polycoated layflat liner for stability and layflat

Typical Uses:
- Exterior vehicle decoration/personalization
- Trim accent on consoles, dash on vehicle interior
- Watercraft
- Customization of electronic equipment including:
  - Computers
  - Mobile phones
  - Tablets
  - Game consoles

Physical Properties	Typical Values
Thickness, inches (μm) Film plus adhesive	**0.0079** (200)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.3**
Peel Adhesion, lb/in. (N/25 mm) 180°F Stainless Steel - 20 min. - 24 hr - 1 wl	**2.3** (10) **3.2** (14) **3.4** (15)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**>12** (40) **>150%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Color	Roll Width x Length	Weight: Pounds
TF1088BF	Black	60" x 82'	35
TF1028BF	White	60" x 82'	35
TF1068BF	Silver	60" x 82'	35
TF1078BF	Gold	60" x 82'	35
TF8801BF	Graphite	60" x 82'	35

White **TF1028BF**

Gold **TF1078BF**

Silver **TF1068BF**

Black **TF1088BF**

Graphite **TF8801BF**

Application: Vehicle Wrap
Material: MACmark TuningFilm

Application: Game Station
Material: MACmark TuningFilm

Note: **Call for a TuningFilms Color Card (MAC2866) for actual colors.**

Tuningfilm

4yr | air egress | colors | CURVED surface

Application: Vehicle Wrap
Material: MACmark® Iridescent
Fuchsia-Green

Call for a TuningFilm Color Card (MAC2866) for actual color swatches.

TuningFilm Iridescent
TuningFilm Iridescent creates a custom, color-changing visual with true "wow" factor. The Pearl produces a reddish and greenish reflection. The Blue-Green and Fuchsia-Green finishes change color from different viewing angles.

Features and Benefits:
- Conformable cast vinyl with unique finishes
- Applies over corrugated and curved surfaces
- Up to four years outdoor durability
- 3.9-mil soft cast vinyl film
- 80# polycoated layflat liner for stability
- Repositionable, user-friendly adhesive

Typical Uses:
- Designed for full and partial vehicle wraps
- Watercraft
- Electronic equipment & furniture decoration
- Racing and rally stripes

Physical Properties		Typical Values	
		Pearl	Fuchsia-Green & Blue-Green
Thickness, inches (µm) Film plus adhesive		**0.0053** (135)	**0.0053** (135)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum		**<0.2**	**<0.2**
Peel Adhesion, lb/in. (N/25 mm) 180°F Stainless Steel	- 20 min. - 24 hr - 1 wk	(16) (20) (25)	(14) (18) (23)
Face Material Data,68°F (20°C) Tensile strength lb/in. (Nk/m) Elongation %		**>(25)** **>150%**	**>(25)** **>150%**
Temperature Ranges Application: **59° to 104°F** (15° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)			
Flammability, Self-extinguishing ISO 3795			
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.			

Fushia-Green **TF3002**   Blue-Green **TF3003**

Pearl **TF3015**

Stock No.	Color	Roll Width x Length	Weight: Pounds
TF3002	Fushsia-Green	60" x 82'	26
TF3003	Blue-Green	60" x 82'	26
TF3015	Pearl	60" x 82'	26

Tuningfilm

5yr | air egress | CURVED surface | TEXTURED finish

Application: Vehicle Wrap
Material: MACmark® TuningFilm
Textured - Leather

TuningFilm Textured
are **structured cast vinyls** for dramatic effects on vehicles, electronic equipment and furniture. Available in silver moon, for a hammered effect or black leather.

Features and Benefits:
- Black Leather for real leather appearance
- Silver Moon for hammered effect
- Applies over corrugated and slightly curved surfaces
- Up to five years outdoor durability
- 8.7-mil soft cast vinyl film
- Repositionable transparent acrylic adhesive
- 80# polycoated layflat liner for stability

Typical Uses:
- Designed for partial vehicle wraps
- Electronic equipment & furniture decoration
- Racing and rally stripes
- Watercraft

Physical Properties	Typical Values	
Thickness, inches (µm) Film plus adhesive	**0.0102** (260)	
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.02**	
Peel Adhesion, lb/in. (N/25 mm) 180°F Stainless Steel - 20 min. - 24 hr - 1 week	(12) (15) (18)	
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**≥** (25) **≥ 80%**	
Temperature Ranges Application: **59° to 104°F** (15° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)		
Flammability, Self-extinguishing ISO 3795		
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.		

Black Leather **TF3102**   Silver Moon **TF3155**

Stock No.	Color	Roll Width x Length	Weight: Pounds
TF3102	Black Leather	60" x 82'	29
TF3155	Silver Moon	60" x 82'	30

MACmark®

TuningFilm Brushed Metal BF

TuningFilm Brushed Metal BF embossed vinyls can give a realistic metal special effect to applications. All five colors available with the patented B•free® air-egress adhesive for fast easy installations.

Features and Benefits:

- Create special effects with five different matte brushed metal colors: Black, Aluminum, Steel, Titanium and Graphite
- Up to five years outdoor durability (Steel - four years, Aluminum - two and a half years)
- 5.5-mil cadmium-free polymeric vinyl film
- B•free® air-egress adhesive for quick bubble-free installation
- 90# Polycoated layflat liner for stability

Typical Uses:

- Designed for full and partial vehicle wraps
- Electronic equipment & furniture decoration
- Racing and rally stripes
- Watercraft

Physical Properties	Typical Values
Thickness, inches (μm) Film plus adhesive	**0.0071** (180)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.03**
Peel Adhesion, lb/in. (N/25 mm) 180°F Stainless Steel - 20 min. - 24 hr - 1 week	(12) (15) (16)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**≥** (25) **≥ 80%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Color	Roll Width x Length	Weight: Pounds
TF16800BF	Brushed Aluminum BF	60" x 82'	30
TF16801BF	Brushed Titanium BF	60" x 82'	30
TF16802BF	Brushed Steel BF	60" x 82'	30
TF16803BF	Brushed Graphite BF	60" x 82'	30
TF18800BF	Brushed Black BF	60" x 82'	30

Brushed Aluminum **TF16800BF**

Brushed Titanium **TF16801BF**

Brushed Steel **TF16802BF**

Brushed Graphite **TF16803BF**

Brushed Black **TF1800BF**

mactac®   61

MACmark®

Intermediate | Marking Films

8900PRO is a matte vinyl with removable adhesive specifically designed for wall applications, available in both bright colors for signs and softer colors for **environmental graphics**. Gloss finish also available in select colors.
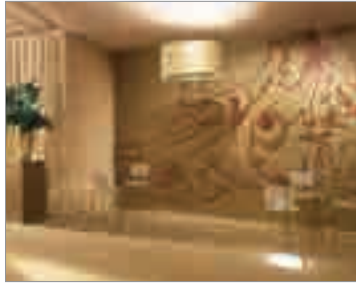
Application: Walls
Material: MACmark® 8900

Application: Promotional graphics
Material: MACmark 8900

Recommended Application Tapes:
• MACtransfer® 210 for medium to large decals
• MACtransfer 220 for small letters and fine lines

Features and Benefits:
• Includes trend setting designer colors used in environmental graphics
• Non-glare mattes for design and signage. Gloss black and white available.
• Excellent dimensional stability
• Up to five years indoors
• Outdoors black and white four years outdoors, colors three years
• Superior cutting and weeding
• 2.8-mil cadmium-free calendared vinyl
• Removable adhesive cleanly removes after two years from most surfaces
• 83# Bleached white Kraft liner for stability and layflat

Typical Uses:
• Home décor and interior design
• Wall words
• Way finding
• Signs
• Window graphics
* Floor graphics
• P.O.P

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.035** (89)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.10**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 1 week	**0.9** (4.0) **1.7** (7.5)
Face Material Data,68°F (20°C) Tensile strength lb/in. (kN/m) Elongation %	**>11** (2.0) **>150%**
Temperature Ranges Application: **32° to 104°F** (0° to 40°C) End Use: **-40° to 158° F** (-40° to 70°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 164'	42
CR	24" x 164'	21

Gloss White **8929-00**	Light Orange **8908-28**	Burgundy **8958-12**	Spinach Green **8948-33**	Intense Blue **8938-01**	Medium Gray **8988-15**
Gloss Black **8989-00**	Orange **8902-22**	Cyclamen **8958-04**	Dark Green **8948-30**	Cosmic Blue **8938-18**	Concrete Gray **8988-11**
White **8928-00**	Dark Orange **8908-29**	Green-Yellow **8948-09**	Bahamas Blue **8938-15**	Electric Blue **8938-14**	Pearl Gray **8988-17**
Black **8988-00**	Flame Red **8958-35**	Lime **8948-10**	Turquoise Blue **8938-07**	Violet **8938-19**	Ivory **8928-18**
Lemon Yellow **8908-12**	Red **8958-37**	Spring Green **8948-31**	Turquoise Green **8948-13**	Royal Blue **8938-13**	Beige **8928-17**
Light Yellow **8908-25**	Blood Red **8958-34**	Kiwi **8948-11**	Mint **8948-14**	Methylene Blue **8938-20**	Nut Brown **8982-12**
Yellow **8908-27**	Currant Red **8958-36**	Matte Green **8948-29**	Light Blue **8938-16**	Highway Blue **8938-02**	Chocolate Brown **8982-11**
Buttercup **8908-26**	Medium Red **8958-33**	Leaf Green **8948-08**	Sky Blue **8938-04**	Cobalt Blue **8938-17**	Gold **8978-00**
Sunflower Yellow **8904-23**	Camine Red **8958-38**	Medium Green **8948-28**	Medium Blue **8938-00**	Graphite **8988-16**	Silver **8968-00**

8900 Designer Series Colors

Lagoon Blue 8938-39	Water Lily 8948-22	Baby Doll 8958-00	Magnolia 8958-21	Sepia Brown 8982-10	Antique White 8928-16
Pastel Turoquoise 8938-60	Pesto 8948-25	Dahila Pink 8958-19	Antique Violet 8958-23	Silk Grey 8988-00	
Blue Grey 8938-61	Oasis 8948-26	Bishop Purple 8958-20	Mocha 8982-09	Mustard 8908-20	

Note: Colors shown may vary due to the printing process. Call for a 8900PRO Series Color Card (MAC2846) for actual colors.

MACmark®

8300PRO is a high-gloss intermediate **workhorse vinyl** for most of your flat surface applications. Lasts up to five years outdoors. The white vinyl features a contrasting gray liner for **quick weeding** on complex designs and makes the job easy on your eyes.

Features and Benefits:

- Highest gloss intermediate color vinyl
- Up to five years outdoors for black and white; four years colors
- Superior cutting and weeding
- 2.8-mil cadmium-free calendared vinyl
- Permanent adhesive
- 83# Bleached white Kraft liner for stability and layflat

Typical Uses:

- Promotional signage (flat surfaces)
- Window graphics

Physical Properties	Typical Values
Thickness, inches (μm) Film plus adhesive	**0.037** (94)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.3**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 20 min. - 1 week	**3.2** (14) **4.4** (19)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**>9.5** (25) **>150%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 158° F** (-40° to 70°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CS – punched	15" x 164'	14
CE	15" x 164'	14
CR	24" x 164'	21
CJ – punched	30" x 164'	28
CF	30" x 164'	28
CV	48" x 164'	42
CY	60" x 164'	53

Application: Signage
Material: MACmark®

Application: Window Graphics
Material: MACmark 8300PRO

Recommended Application Tapes:
- MACtransfer® 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

Gloss White **8329-00**
Gloss Black **8389-00**
Matte White **8328-00**
Matte Black **8388-00**
Silver **8369-00**
Gold **8379-00**
Orange **8301-22**
Sunflower Yellow **8303-23**
Medium Yellow **8305-24**
Light Yellow **8309-30**
Sandstone **8329-13**
Light Beige **8329-14**
Medium Blue **8339-00**

Highway Blue **8339-02**
Sky Blue **8339-04**
Ocean Blue **8339-06**
Turquoise **8339-07**
Royal Blue **8339-13**
Electric Blue **8339-14**
Purple Blue **8339-30**
Navy **8339-33**
Medium Green **8349-34**
Apple Green **8349-35**
Dark Green **8349-30**
Bottle Green **8349-05**
Spring Green **8349-31**

Polo Green **8349-16**
Medium Red **8359-36**
Blood Red **8359-39**
Cyclamen **8359-04**
Dark Red **8359-33**
Passion Red **8359-40**
Burgundy **8359-12**
Chocolate Brown **8383-13**
Imitation Gold **8383-14**
Terra Cotta **8383-06**
Dark Gray **8389-18**
Slate Gray **8389-19**
Frosty Gray **8389-20**
Clear **8399-00**

Special Order

Apricot **8309-31**
Sandstone **8329-13**
Almond **8329-15**
Lavender **8339-31**
Copenhagen Blue **8339-32**
Butterfly Blue **8339-34**
Powder Blue **8339-35**

Nautical Blue **8339-36**
Seafoam Green **8349-15**
Vibrant Green **8349-17**
Flame Red **8359-35**
Raspberry **8359-15**
Mouse Gray **8389-04**

Note: Colors shown may vary due the printing process. Call for a 8300PRO Series Color Card (MAC2761) for actual colors.

MACmark®

5yr | CURVED surface | FLAT surface | Permanent

Application: Frosted glass
Material: MACmark Glass Décor 700

Recommended Application Tapes:
- MACtransfer® 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

Note: Colors shown may vary due the printing process. Call for a Specialty Films Color Card (MAC2759) for actual colors.
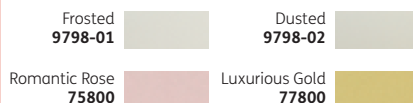
Glass Décor 700 is a translucent vinyl providing either **frosted** or **etched look**

to clear glass surfaces. Two matte finishes: frosted and dusted and five matte frosted colors. Ideal for decorating glass windows, mirrors or doors for an etched, frosted or sandblasted look.

Features and Benefits:
- Significant cost savings over etching or sandblasting
- Up to five years indoor/outdoor durability
- Excellent layflat characteristics on plotter
- 3.0-mil cadmium-free translucent vinyl
- Durable transparent clear permanent adhesive with excellent wet-out
- 83# Bleached white Kraft liner with squared red backprinting for positioning

Typical Uses:
- Glass partition in restaurants
- Shopping malls, retail stores, offices and other places of business
- Events and trade shows
- Residential design, privacy accents without sacrificing natural light

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0045** (115)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.1**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr - 1 week	**3.2** (14) **3.9** (17) **4.3** (19)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**>25** **>80%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)	
Flammability, Self-extinguishing ISO 3795	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CR	24" x 164'	21
CV	48" x 164'	42
CY* NEW!	60" x 164'	53

* Dusted & Frosted Only

Frosted **9798-01**	Dusted **9798-02**
Romantic Rose **75800**	Luxurious Gold **77800**

Offshore Blue **73800**	Refreshing Mint **74800**	Sparkling Yellow **70800**

MACmark®

MACcrystal® 8400 create a stained-glass effect with specially designed transparent vinyls in a variety of bright colors for window decoration and use in illuminated signs.

Features and Benefits:
- Glossy transparent vinyl
- Color uniformity day or night
- Up to three years outdoors
- 3.1-Mil gloss transparent vinyl
- Clear permanent adhesive
- 83# Bleached white Kraft liner

Typical Uses:
- Windows and glass
- Translucent illuminated signs
- Environmental Graphics

| Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0042** (105)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.5** (0.1.27)
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr - 1 week	**3.2** (14) **4.1** (18) **4.4** (19)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/15 mm) Elongation %	**>11.0** (30) **>150%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-40° to 194° F** (-40° to 90°C)	
Flammability, Self-extinguishing	ISO 3795
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 82'	43

Application: Window Graphics
Material: MACmark® MACcrystal

Deep Yellow **8407-01**	Heaven Blue **8437-05**	Light Green **8447-04**	Fushia **8457-04**
Orange **8407-03**	Aqua **8437-06**	Yellow Green **8447-05**	Rose **8457-05**
Light Blue **8437-02**	Medium Green **8447-01**	Deep Red **8457-01**	Light Grey **8487-01**
Medium Blue **8437-03**	Leaf Green **8447-03**	Light Red **8457-02**	Grey **8487-02**
Deep Blue **8437-04**			

MACmark®

Specialty | Marking Films

7 yr | colors | CURVED surface | Permanent

Application: Vehicle Wrap
Material: MACmark® 5700

5700 Reflective are flexible, engineering grade films with excellent night and day visibility. Easy to cut, easy to weed, 5700 Reflectives are also solvent and UV

printable. A 92# white, polycoated LayFlat™ liner offers stability and layflat qualities.

Features and Benefits:
- Excellent day and night visibility
- Very flexible, can be applied over rivets and corrugated surfaces
- 5-7 Year outdoor durability

Typical Uses:
- Vehicle markings
- 24 Hour-a-day eye catching identification

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.006** (150)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.3**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 1 week	**4.6** (20) **5.9** (26)
Face Material Data,68°F (20°C) Tensile strength lb/in. (Nk/m) Elongation %	**>8.5** ($\geq$1.5) **>100%**
Temperature Ranges Application: **50° to 104°F** (10° to 40°C) End Use: **-4° to 194° F** (-20° to 90°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

White **5729-00**	Red **5759-00**	
Black **5789-00**	Light Blue **5739-00**	
Yellow **5709-00**	Dark Blue **5739-01**	
Orange **5701-00**	Green **5749-00**	

Note: Colors shown may vary due the printing process. **Call for a Specialty Films Color Card (MAC2759) for actual colors**.

Stock No.	Roll Width x Length	Weight: Pounds
CS punched	15" x 150'	
CE	15" x 150'	14
CR	24" x 150'	21
CJ punched	30" x 150'	
CF	30" x 150'	28
CV	48" x 150'	42

5 yr | GLOSS finish | CURVED surface | Permanent

Application: Vehicle Graphics
Material: MACmark® Lustres

Recommended Application Tapes:
- MACtransfer® 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

6400 Iridescent Lustre designed for high profile applications over flat to complex curves like **rivets**, **corrugations** and other irregular surfaces. 2.0-Mil cadmium-

free cast vinyl offering a **pearly, anodized finish** that gleams in the sun.

Features and Benefits:
- 2.0-mil cast vinyl
- Permanent, high-bond solvent-acrylic adhesive
- Five year outdoor durability
- Flat, curved, corrugated or riveted surfaces
- 78# Bleached white Kraft liner for good stability and layflat

Typical Uses:
- OEM/aftermarket automotive
- Recreation vehicle and marine

Note: Call for a Specialty Films Color Card (MAC2759) for actual colors.

* Special Order Colors - 14 day lead time

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0040** (101)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.2**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min. - 24 hr	**2.8** (12.5) **4.0** (17.5)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m) Elongation %	**>7.5** (1300) **>80%**
Temperature Ranges Application: **40° to 104°F** (5° to 40°C) End Use: **-50° to 225° F** (-45° to 107°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 150'	42

Special Order*	Special Order*	Special Order*	Special Order*	Special Order*
Pearl **6429-00**	Crimson **6459-01**	Forest Green **6449-02**	Bold Blue **6439-02**	Shiny Copper **6401-10**
Dandelion **6409-01**	Fuchsia **6459-10**	Caribbean Blue **6449-10**	Aqua **6439-04**	Granite **6489-02**
Fire Red **6459-00**	Mauve **6459-20**	Eucalyptus **6439-10**	Grape **6439-30**	*14 Day lead time on special orders.

MACmark®

6700 Sparkle Metallic is a premium film with a high concentration of **metallic flakes**, designed for high profile applications over flat to complex curves like **rivets**, **corrugations** and other **irregular surfaces**.
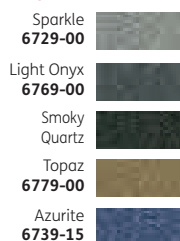
Features and Benefits:
- 3.0-mil high-gloss cadmium-free cast vinyl
- Five year outdoor durability
- Permanent solvent acrylic adhesive
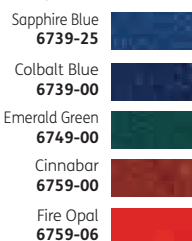- 78# Bleached white Kraft liner for good stability and layflat

Typical Uses:
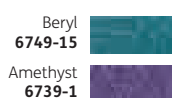- Fleet & Marine marking
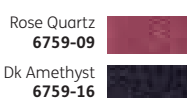- Container decals
- Equipment identification

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0040** (101)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.2**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**2.8** (12.5)
- 24 hr	**4.0** (17.5)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m) Elongation %	**>7.5** (1300) **>80%**
Temperature Ranges Application: **40° to 104°F** (5° to 40°C) End Use: **-50° to 225° F** (-45° to 107°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Application: Marine Markings
Material: MACmark® Sparkle Metallic

5 yr | **HIGH GLOSS finish** | **CURVED surface** | **Permanent**

Special Order*		Special Order*	
Sparkle **6729-00**		Sapphire Blue **6739-25**	
Light Onyx **6769-00**		Colbalt Blue **6739-00**	
Smoky Quartz		Emerald Green **6749-00**	
Topaz **6779-00**		Cinnabar **6759-00**	
Azurite **6739-15**		Fire Opal **6759-06**	

Special Order*	Special Order*	Special Order*
Beryl **6749-15**	Rose Quartz **6759-09**	Aventura **6783-05**
Amethyst **6739-1**	Dk Amethyst **6759-16**	

* Special Order Colors - 14 day lead time

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 150'	42

6800 Fluorescents are **short-term** cast **fluorescent** vinyl designed for **six month** outdoor use. Available with a permanent solvent acrylic adhesive these vinyls are excellent for short-term promotional use on windows, P.O.P., display panels, exhibit walls and screen printed decals.

Features and Benefits:
- 2.3-mil cast vinyl
- Permanent solvent acrylic adhesive
- Six month outdoor durability
- Semi-gloss finish
- Flat, curved or corrugated surface installation

Typical Uses:
- Short-term indoor or outdoor applications
- P.O.P.
- Display panels
- Exhibit walls
- Screen printed decals

Physical Properties	Typical Values
Thickness, inches (µm) Film plus adhesive	**0.0035** (90)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum	**<0.25**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**3.2** (14)
- 24 hr	**4.5** (20)
Face Material Data,68°F (20°C) Tensile strength lb/in. (N/m) Elongation %	**>8.57** (1500) **>9.5** (0.97) **>100%**
Temperature Ranges Application: **40° to 104°F** (5° to 40°C) End Use: **-50° to 225° F** (-45° to 107°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	Weight: Pounds
CV	48" x 150'	42

Fluorescent Orange **6802-00**	Fluorescent Yellow **6804-00**	Fluorescent Blue **6834-00**	Fluorescent Green **6844-00**
Fluorescent Red **6854-00**	Fluorescent Pink **6856-00**		

Note: Colors shown may vary due the printing process. **Call for a Specialty Films Color Card (MAC2759) for actual colors**.

Application: Decals
Material: MACmark® Fluorescents

6 month | **HIGH GLOSS finish** | **CURVED surface** | **Permanent**

Recommended Application Tapes:
- MACtransfer 210 for medium to large decals
- MACtransfer 220 for small letters and fine lines

MACmark®

Specialty | Marking Films

wallCHALKER™ is a unique intermediate film designed **specifically for chalkboard applications**. The face is a textured matte black, 4.7-mil, and cadmium free semi-rigid vinyl. It is coated with a unique moderately aggressive removable acrylic adhesive, which can be applied at temperatures down to 32° F and yet, is cleanly removable from most common surfaces for up to 2 years. The liner is an 83# white kraft offering stability and layflat.

Features and Benefits:
- 4.7-mil vinyl
- Cut to unique shapes
- Easy to clean
- Aggressive removable adhesive, strong enough to support large size applications
- Cleanly removable

Typical Uses:
- Walls
- Menu Boards
- Kitchen Sign Boards
- Tables
- Advertisements
- Meeting Rooms
- Point-of-Purchase
- Novelty Decals
- Playrooms/Children's Bedrooms

Application: Interior walls
Material: MACmark® wallCHALKER

Physical Properties		Typical Values
Thickness, inches (µm) Film plus adhesive		**0.0055** (140)
Dimensional Stability (shrinkage),% 48 hours @ 158°F (70°C) bonded aluminum		**<0.10**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel	- 30 min.	**0.91** (4.0)
	- 24 hr	**1.16** (5.1)
Glass	- 30 min.	**0.91** (4.0)
	- 24 hr	**1.23** (5.4)
Temperature Ranges Application:	**32° to 104°F** (0° to 40°C)	
End Use:	**-40° to 158° F** (-40° to 70°C)	
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.		

MACmark®

MACtransfer® 210 is a translucent saturated paper stock coated on one side with a medium tack, pressure-sensitive adhesive. It is designed to assist in the transfer and application of **medium and large** size pressure-sensitive decals that have been die cut into letters, legends, striping and logos. It also has a general application use in the protection of most finished or polished surfaces during fabrication, storage, shipment and handling.

Features and Benefits:
- Translucent paper makes viewing graphic easy.
- Medium tack adhesive to aid in transfer of medium and large decals or graphics.

Typical Uses:
- Transfer of diecut letters and decals to final substrate

Physical Properties	Typical Values
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 20 min.	**11** (3.1)
Tensile, oz./in.	**11.5**
Elongation, %	**2.5**
Tear, grams	**50**
Thickness, mils (um)	**4.3** (16)
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	#/Ctn	Weight: Pounds
ST1060	60" x 300'	1 Roll	32
ST1054	54" x 300'	1 Roll	28
ST1048	48" x 300'	1 Roll	25

Application: Storefront Advertising
Material: MACtransfer

MACtransfer 220 is a translucent saturated paper stock coated on one side with a high-tack, pressure-sensitive adhesive. It is designed to assist in the application and transfer of **small and medium** sized, pressure-sensitive decals that have been die cut into letters, legends, striping and logos. It also has a general application use in the protection of most finished or polished surfaces during fabrication, storage, shipment and handling.

Features and Benefits:
- Translucent paper makes viewing graphics easy.
- High-tack adhesive to aid in transfer of small- and medium-sized decals.

Typical Uses:
- Transfer of diecut letters and decals to final substrate
- Protection of polished surfaces

Physical Properties	Typical Values
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 20 min.	**7.3** (2.0)
Tensile, oz./in.	**14.6**
Elongation, %	**2.2**
Tear, grams	**50**
Thickness, mils (um)	**3.9** (100)
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	#/Ctn	Weight: Pounds
ST2048	48" x 300'	1 Roll	25
ST2030	30" x 300'	1 Roll	15
ST2024	24" x 300'	2 Roll	24
ST2014	14" x 300'	4 Roll	28

Application: Storefront Advertising
Material: MACtransfer

MACmask® CM8400 is a 3.2-mil soft, gray, matte transparent vinyl film coated on one side with a low bonding, rubber-based, pressure-sensitive adhesive with an 83# white Kraft release liner. The adhesive is specifically designed for use on canvas and other flexible facestocks to mask large areas cost effectively and provide easy removability.

Features and Benefits:
- Textured surface reduces over-spray

Typical Uses:
- Masking off for wall murals.
- Masking off for vehicle graphics

Physical Properties	Typical Values
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**0.60** (2.5)
- 1 week	**1.00** (4.4)
Elongation, %	**200.00**
Thickness, mils (um)	**0.0035** (88.8)
Shelf Life: Two years when stored between 60-80°F (15-25°C) and 50% RH or less.	

Stock No.	Roll Width x Length	#/Ctn	Weight: Pounds
CM8424	24" x 164'	1 Roll	21
CM8448	48" x 164'	1 Roll	42
CM8460	60" x 164'	1 Roll	53

Application: Wall mural
Material: MACmask

Specialty Tapes | Technical

Material: GS-Series

MACfilm® GS-Series Strip Adhesives

are made up of an **unsupported SBR pressure-sensitive adhesive, specially coated by Mactac using a patented, proprietary process** and wound on a 60# densified kraft release liner. GS-Series adhesive provides **very aggressive tack and peel adhesion along with superior shear strength**. The adhesive bonds to a wide variety of materials including low energy surfaces such as polyethylene and polypropylene. The standard thickness of 5- to 60-mils provides the mass needed to establish secure bonds to uneven or irregular surfaces.

Physical Properties	Typical Values
Quick Tack, lb./sq. in. Stainless Steel	**20+**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**22+**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+**
Thickness, inches only adhesive	**.020 or .035**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **0° to 180° F** (-18° to 82°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Stock No.	Roll Width x Length	Thickness
GS9020*	1" x 200'	20 mils
GS9035*	3/4" x 200'	35 mils
* 8 rolls/ctn, 1 ctn minimum		

Material: MACbond

MACbond® IB1178XT

consists of a **thin polyester film coated on both sides with a general purpose, rubber-based pressure-sensitive adhesive**. The product is supplied self-wound on a 60#densified, semi-bleached kraft liner. Designed for **general purpose bonding applications such as in the gasket, seal and trim markets**. Typically used for bonding to foams, felts, cloths, primed wood, paper, metal, plastics and most low or non-plasticized substrates. It has an excellent balance of economy versus performance and can be used in many applications as an aid to assembly. The polyester carrier provides dimensional stability and superior die cutting properties.

Physical Properties	Typical Values
Quick Tack, lb./sq. in. Stainless Steel	Unwind/Liner **10.0/11.0**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**10.0/11.0**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+/300+**
Thickness, inches only adhesive	**.0034**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **0° to 150° F** (-18° to 66°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Stock No.	Roll Width x Length
MB1182	54" x 750'

MACbond IB1200XT

consists of a **thin non-oriented, polypropylene film coated on both sides with a high-performance, rubber-based pressure-sensitive adhesive**. The adhesive is protected by a release treated, 60# densified kraft liner. Designed to offer unusually **high-tack and peel adhesion without sacrificing shear resistance**. The heavy coated weight of adhesive provides **excellent bonds to both smooth and irregular surfaces**. The non-oriented carrier membrane permits good conformability.

Physical Properties	Typical Values
Quick Tack, lb./sq. in. Stainless Steel	Unwind/Liner **4.5/6.0**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**12.0/11.5**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+/300+**
Thickness, inches only adhesive	**.0066**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **0° to 150° F** (-18° to 66°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Stock No.	Roll Width x Length
MB1200	54" x 750'

MACmark®

MACmount® MM-1800

consists of **1/32" white, closed cell polyethylene foam coated on both sides with a high shear strength rubber-based pressure-sensitive adhesive**. The adhesive is protected by two side release treated, polycoated natural kraft liner. **Use where the ultimate in holding power is desired for indoor applications**. This aggressive adhesive bonds to most surfaces, including low energy materials, such as polyethylene and polypropylene. The 1/32" foam carrier provides a gap filling function that aids in the joining of uneven or irregular surfaces.

Physical Properties	Typical Values
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	Unwind/Liner **--/--**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+/300+**
Thickness, inches only adhesive	**.036**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **0° to 150° F** (-18° to 66°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Stock No.	Roll Width x Length
MM1800	54" x 216'

Material: MACmount

MACmount MM-1810

consists of **1/16" white, closed cell polyethylene foam coated on both sides with a high shear strength rubber-based pressure-sensitive adhesive**. The adhesive is protected by two side release treated, polycoated natural kraft liner. **Generally used where the ultimate in holding power is desired for indoor applications**. This aggressive adhesive bonds to most surfaces, including low energy materials such as polyethylene and polypropylene. The 1/16" foam carrier provides a gap filling function that aids in the joining of uneven or irregular surfaces.

Physical Properties	Typical Values
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	Unwind/Liner **--/--**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+/300+**
Thickness, inches only adhesive	**.066**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **0° to 150° F** (-18° to 66°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Stock No.	Roll Width x Length
MM1810	54" x 108'

UGlu®

UGlu® is made up of an unsupported, rubber-based, pressure-sensitive adhesive, specially coated by Mactac®. 60# Kraft liner with dual 1/4" ungummed edges. UGlu has an aggressive tack and peel adhesion along with superior shear strength. The standard adhesive thickness of 20-mils provides the mass needed to establish secure bonds to uneven, irregular and dissimilar surfaces. UGlu is non-toxic (ASTM D4236) and acid free.

Physical Properties	Typical Values
Quick Tack, lb./sq. in. Stainless Steel	**4.5**
Peel Adhesion, lb/in. (N/25 mm) Stainless Steel - 30 min.	**5.0**
Shear, Hours to fail Stainless Steel - 1000 g/sq. in @ 72°F	**300+**
Thickness, inches only adhesive	**.005**
Temperature Ranges Application: **Above 50°F** (10°C) for best performance End Use: **-40° to 250° F** (-40° to 121°C)	
Shelf Life: One year when stored at 75°F (24°C) and 50% relative humidity or less.	

Features and Benefits:
- Non-toxic and acid free
- Instant bond and permanent hold
- Waterproof and weatherproof

Typical Uses:
- Bonds to many smooth and rough surfaces
- DIY, Arts and crafts projects

Stock No.	Strip Width x Length	#/Carton
MTR900	1" x 3"	250 Strips

Visit mactac.com to download the most up-to-date version of these line guides as well as product brochures, Performance Guides and ICC profiles.

mactac®
technology that sticks