



Controltac™ Graphic Film

Series 180

Controltac™ Graphic Film with Comply™ Adhesive or Comply™ v2 Adhesive

Series 180C and Series 180Cv2

For Screen Printing Only

Product Description

These are 2-mil films that offer great versatility along with slideable, repositionable, pressure-activated adhesive. These long-term durable and removable films have excellent hiding power and stability, making them perfect for indoor and outdoor signs and fleet graphics, including surfaces with corrugations and rivets. Film series 180C and 180Cv2 with Comply adhesive also have air release channels for fast and easy, bubble-free graphic installations. The films with Comply v2 adhesive have non-visible air release channels. Use for screen printing.

Recommended Types of Graphics and End Uses

When constructed and used as described in this Bulletin, these types of graphics and end uses may be warranted by the 3M™ MCS™ Warranty. Please read the entire Bulletin for details.

- Indoor and outdoor graphics and signs
- Commercial vehicle and fleet graphics, emblems or striping
- Bus graphics
- Standard vehicle graphics
- Transparent film color 114 can be used for two-way emblems for windows, except on buses or other vehicles
- Small format original equipment manufacturer's (OEM) decorative and identification graphics, cautionary and safety labeling

Limitations of End Uses

3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs or recommend other products.

Unsuitable End Uses for This Film

- Graphics applied to:
 - stainless steel
 - non-3M films (see Removal Warranty)
 - painted substrates with poor paint to substrate, or paint-to-paint bond
 - substrate surfaces that are not clean and smooth (little or no variation in texture)
- Film without graphic protection
 - vehicle graphics
 - exposure to abrasive conditions, harsh cleaners or chemicals
- Graphic removal from:
 - applications with poor paint-to-substrate adhesion
 - existing graphics that must remain intact; damage may occur during removal of this film
 - outdoor, horizontal applications

continued on the next page

- Graphics subjected to gasoline vapors or spills, including those at or on gas pumps, automobile fuel-tank ports, or top-feeding, petroleum tankers
- Graphics made for automotive Original Equipment Manufacturers (OEM); contact 3M Automotive Division at 1-800-328-1684 for alternatives.

Wall Graphics

Two mil cast films are typically the best choice for indoor smooth surface wall graphics. However, the user is responsible for determining the product's suitability, including adhesion and, if required, removal characteristics. Due to the wide variability of smooth indoor walls, neither finished graphics nor removal is warranted, even for removable or changeable films. Instruction Bulletin 5.37 provides comprehensive information for the most successful wall graphics film selection and application.

Important Information About Bus Applications

Film used on buses must not be applied so as to restrict the safe use of emergency window exits. See the most current version of Instruction Bulletin 5.4 for details.

Compatible Products

3M Graphic Materials

This Bulletin provides details about the base film and construction options and warranty. Additional specific information about compatible products can be found in the Product and Instruction Bulletins listed in **3M Related Literature** at the end of this bulletin.

Screen Printing Inks

- 3M™ Screen Printing Ink Series 1900 *line color and four color*
- 3M™ Screen Printing UV Ink Series 9800 *line color and four color*
- Sericol™ Duracal™ UV Screen Print Ink (*approved for OEM applications only*)
- Sericol™ Duracal™ Screen Print Clear (*approved for OEM applications only*)

Graphic Protection Options

- 3M™ Screen Print Gloss Clear 1920DR
- 3M™ Screen Printing Low Gloss Clear 1930
- 3M™ Screen Print UV Gloss Clear 9720i
- 3M™ Screen Print Clear 9720UV
- 3M™ Screen Printing Gloss Clear 9800CL

Other Products

- 3M™ Premasking Tape SCPM-3
- 3M™ Premasking Tape SCPM-44X
- 3M™ Prespacing Tape SCPS-55
- 3M™ Edge Sealer 3950
- 3M™ Edge Tape 8914

Sericol Inks

Sericol's Duracal inks can be obtained through their distributor network. Please refer to this web site for details: <http://www.sericol.com/Distributors/distribFR.htm>. You can also contact Sericol at: Sericol Inc. Corporate Office
1101 W. Cambridge Drive, Kansas City, KS 66103
Tel: 913-342-4060, Fax: 913-342-4752.

Characteristics

These are typical values for unprocessed product; processing may change the values. Contact your 3M representative for a custom specification.

Physical Characteristics

Characteristic	Value	
Film	Vinyl	
Film color	See Color Table, below	
Thickness	Without adhesive: 2 mil (0.05 mm) With adhesive: 3-4 mil (0.08-0.10 mm)	
Adhesive	Film series 180: Pressure activated, slideable, positionable Film series 180C/180Cv2: Pressure activated, slideable, positionable, air release channels	
Adhesive color	Gray	
Liner	Polyethylene-coated paper	
Adhesion, Typical 24 hours after application	Substrate	Adhesion
	ABS	4.2 pounds/inch (0.75 kg/cm)
	Acrylic enamel)	3.5 pounds/inch (0.63 kg/cm)
	Aluminum, anodized	7.9 pounds/inch (1.42 kg/cm)
	Aluminum, etched	5.2 pounds/inch (0.93 kg/cm)
	Chrome	4.8 pounds/inch (0.87 kg/cm)
	Fruehauf pre-painted panels	4.0 pounds/inch (0.7 kg/cm)
Tensile strength	5 pounds/inch at 73°F (0.9 kg/cm at 23°C)	
Chemical resistance	<ul style="list-style-type: none"> Resists mild alkalis, mild acids, and salt Excellent resistance to water (<i>does not include immersion</i>) Resists occasional fuel spills 	
Flammability	Call 1-800-328-3908 for information	

Color Table

Solid Colors					Metallic and Transparent		
10	White	38	Royal Purple*	88	Violet*	201	Slate*
12	Black	39	Tan	96	Teal*	203	Red*
13	Tomato Red	41	Dark Gray*	98	Dark Violet*	211	Charcoal*
14	Bright Orange	46	Kelly Green	103	Magenta*	216	Sage Green*
15	Bright Yellow*†	47	Intense Blue	120	Satin Aluminum	217	Dark Blue*
17	Vivid Blue	49	Beige	131	Satin Gold*	220	Light Silver*
19	Deep Mahogany	53	Cardinal Red	173	Salmon Pink*	221	Grey*
22	Matte Black*	54	Light Orange	176	Aqua*	227	Bright Blue*
23	Deep Red	56	Dark Green	186	Bright Green*	228	Dark Burgundy*
25	Sunflower*†	57	Olympic Blue	193	Mauve	229	Copper*
27	Indigo (Navy)	58	Burgundy*	196	Apple Green*	237	Silver Blue*
29	Russet Brown	63	Geranium	307	Dark Aqua*	239	Chocolate
31	Medium Grey*		Brown*				Brown*
37	Sapphire Blue	77	Peacock Blue			241	Gold*
						114	Transparent*†

* Indicates clear adhesive; all other adhesive is gray-pigmented

† Indicates minimal or no hiding power

Application Characteristics

Characteristic	Value
Finished graphic application recommendation	<p>Surface type: Flat, with and without rivets, simple curves, moderate compound curves, and corrugations</p> <p>Substrate type: ABS resins, aluminum, chrome, glass, fiber-glass reinforced plastics, paint (check adhesion to powder-coated or water-based paints)</p> <p>Application temperature:</p> <ul style="list-style-type: none"> Flat surfaces without rivets: 40°-100°F (4°-38°C) Curved or corrugated surfaces with rivets: 50°-100°F (10°-38°C) Compound curves: 60°-90°F (16°-32°C) <p>Application method: Dry</p>
Applied shrinkage	0.015 inches (0.4 mm)
Temperature range after application	-65° to +225°F (-60° to +107°C)
Graphic removal	Removable with heat and/or chemicals from most substrates within the warranty period at 50°F (10°C) minimum (air and substrate)

Warranty Information

The warranty given in the Product Bulletin that is current at the time you purchased the film is the one that 3M will honor. **The warranties in the following table(s) are for finished graphics exposed in a vertical exposure in the United States except the Desert Southwest.** See the warranty sections following this table for additional information.

3M™ MCS™ Warranty for Finished Graphics

Veh - Vehicle Graphics
 Rail = Railroad Graphics
 Sign = General Signage
 OEM = Graphics and Labels for Original Equipment Manufacturers

Ink Series	No Printing				Ink Series 1900				Ink Series 9800				Ink Series 9800 Metallic			
	Veh	Rail	Sign	OEM	Veh	Rail	Sign	OEM	Veh	Rail	Sign	OEM	Veh	Rail	Sign	OEM
Film Colors	10◆●, 12◆, 13◆, 14◆, 15◆, 19, 22, 23, 27, 29, 31, 38, 39, 41, 49, 58, 63, 88, 96, 98, 103, 173, 176, 186, 193, 196, 307															
Graphic Protection																
1920DR, air dry	—	—	—	—	5	5◆	5	5	—	—	—	—	—	—	—	—
1920DR, oven dry	—	—	—	—	6■	6◆■	5■	5■	—	—	—	—	—	—	—	—
1930	—	—	—	—	2	2◆	2	2	—	—	—	—	—	—	—	—
9720i	—	—	—	—	6	6◆	5	5	7	7◆	5	5	5	—	5	5
9800CL	—	—	—	—	—	—	—	—	5	5◆	5	5	5	—	5	5
None	7, LT	8◆	6	5	—	—	—	—	—	—	2	—	—	—	—	—
Film Colors	17, 25◆, 37, 46, 47, 53◆, 54, 56, 57, 77															
1920DR, air dry	—	—	—	—	5	5◆	5	5	—	—	—	—	—	—	—	—
1920DR, oven dry	—	—	—	—	6■	6◆■	5■	5■	—	—	—	—	—	—	—	—
1930	—	—	—	—	2	2◆	2	2	—	—	—	—	—	—	—	—
9720i	—	—	—	—	6	6◆	5	5	6	6◆	5	5	5	—	5	5
9800CL	—	—	—	—	—	—	—	—	5	5◆	5	5	5	—	5	5
None	6, LT	6◆	6	5	—	—	—	—	—	—	2	—	—	—	—	—
Film Colors	120, 131															
1920DR, air dry	—	—	—	—	5	5◆	5	5	—	—	—	—	—	—	—	—
1920DR, oven dry	—	—	—	—	6■	6◆■	5■	5■	—	—	—	—	—	—	—	—
1930	—	—	—	—	2	2◆	2	2	—	—	—	—	—	—	—	—
9720i	—	—	—	—	6	6◆	5	5	5	5◆	5	5	5	—	5	5
9800CL	—	—	—	—	—	—	—	—	5	5◆	5	5	5	—	5	5
None	6	6◆	5	5	—	—	—	—	—	—	2	—	—	—	—	—

Film Colors	114, 201, 203, 211, 217, 220, 221, 227, 228, 229, 237, 239, 241															
1920DR, air dry	—	—	—	—	5	5 ◆	5	5	—	—	—	—	—	—	—	—
1920DR, oven dry	—	—	—	—	6 ■	6 ◆■	5 ■	5	—	—	—	—	—	—	—	—
1930	—	—	—	—	2	2 ◆	2	2	—	—	—	—	—	—	—	—
9720i	—	—	—	—	6	6 ◆	5	5	5	5 ◆	5	5	5	—	5	5
9800CL	—	—	—	—	—	—	—	—	5	5 ◆	5	5	5	—	5	5
None	6	6 ◆	5	5	—	—	—	—	—	—	2	—	—	—	—	—

LT = Lifetime

◆ = Warranty for vertical railroad applications for these colors only and printed with line color inks.

● = Warranty for vertical railroad applications, colors 10 and 12 have 2 additional years for legibility only.

■ = Warranty requires oven drying the last color of ink series 1900 and screen print 1920DR for 2 hours at 150°F (65°C).

3M™ MCS™ Warranty with Sericol Inks

Ink and Graphic Protection: Sericol Duracal UV Screen Print Ink and Clear
Warranty: 3 years

3M™ MCS™ Warranty for Graphics in a Non-Vertical or Desert Southwest Orientation

Use the years of warranted durability indicated in the tables, above, for your graphic construction and the following formulas to determine other durabilities.

Exposure	Percentage of U.S. Vertical Exposure	Example
U.S. Non-vertical	50% (0.5)	0.5 x 5 years = 2.5 years
Desert Southwest Vertical	70% (0.7)	0.7 x 5 years = 3.5 years
Desert Southwest Non-vertical	35% (0.35)	0.35 x 5 years = 1.75 years
Horizontal, Vehicle only	Warranted for legibility only for the stated durability.	

Legibility Warranty for Horizontal Exposure of Fleet Vehicle Graphics for Selected Constructions

Applications subjected to maximum sunlight and environmental conditions used on rooftops of commercially-owned fleet vehicles where identification from the air is needed. The graphic will change color, lose gloss and chalk.

Film Colors: 10, 12, 13, 14, 15, 25, 53, 54		Horizontal Exposure	
Ink Series	Clear	U.S.	U.S. Desert Southwest
No printing	None	5	3
1900	1920DR, oven dry	5	3
9800	9720i	5	3

3M™ MCS™ Warranty Lifetime Warranty for TRAILERS ONLY

This extended warranted durability and remedy is in addition to the terms of the 3M™ MCS™ Warranty for the constructions indicated in the Warranted Durability table on page 3 for fleet vehicles only. A fleet vehicle is defined as being a commercial straight truck or trailer only. The Lifetime Warranty is extended to the original graphics purchaser who still owns the fleet vehicle for which any claim is submitted. The additional remedy, described below, is a pro-rated material replacement and labor reimbursement.

U.S. Exposure	U.S. Desert Southwest Exposure	Percentage of Replacement/Reimbursement	
		Material	Labor
<i>Failure occurs during year:</i>			
8	5	100	100
9	6	80	50
10	7	60	25
11	8	40	10
12	9	20	0
13	10	10	0
14	N/A	10	0
15	N/A	10	0
16 plus	N/A	10	0

Labor Reimbursement
for FLEET ONLY

3M will reimburse 100% of the labor costs associated with the removal, remanufacture and reapplication of a *commercial fleet graphic only* to the extent that 3M determines such amount is reasonable and necessary in the circumstances. This labor cost reimbursement will be determined by 3M on a case-by-case basis taking into account the expected amount of labor needed to make such repairs and other considerations.

Paint Refurbishing Reimbursement Policy
for 3M™ MCS™ Warranty

Warranty Stipulations for Van, Bus, Recreational Vehicles or Automobile ("Vehicle")

Claims for paint damage for certain vehicle graphics will be considered only if a Pre-Installation and Inspection Report (see Instruction Bulletin 5.36) was completed prior to graphic installation and is submitted with any claim for paint damage sustained during the removal of 3M removable or changeable graphic film from vehicles. A separate report for each vehicle involved in the claim is required.

This policy specifically does not include vehicles identified by 3M as watercraft.

Removal Warranty

If the film cannot be successfully removed or an excessive amount of adhesive residue remains on the surface, 3M will reimburse a portion of extra removal costs.

Removal requires heat and/or chemicals. The ease and rate of removal depends on a number of factors. See Instruction Bulletin 6.5 for details.

Removal Labor Reimbursement Remedy
for Removable and Changeable Films

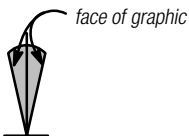
Orientation	Remedy
Vertical	Same as Warranted Durability
Non-vertical (for 3M™ MCS™ Warranty constructions only)	50% of the U.S. Vertical Warranted Durability, not to exceed 3.5 years

Removal Warranty Exceptions

- This film is not designed for short-term graphics on painted wallboard and may cause damage upon removal from painted surfaces.
- Removal from a pre-existing graphic will damage that graphic.
- Aged paint and metals must be tested to ensure removability. Surface oxidation or chalking may result in adhesive residue upon removal.
- Paint that is not firmly bonded to the substrate may be damaged when removing the film.
- Paint that is not properly cured may prevent the film from being removed.
- Outdoor horizontal applications may not remove cleanly.

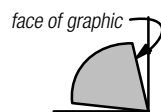
Definitions

Vertical Exposure



The face of the graphic is $\pm 10^\circ$ from vertical.

Non-vertical Exposure



The face of the graphic is greater than 10° from vertical and greater than 5° from horizontal.

Desert Southwest

Graphics exposed to solar energy more than half of the time in Arizona, New Mexico and the desert areas of California, Nevada, Utah and Texas. A detailed map is available at 3Mgraphics.com under Warranties.

OEM

Labels and decorative graphics produced for original equipment manufacturers.

Signs

Graphics applied outdoors and exposed to the elements.

Railroad

Graphics applied on railroad cars but not railroad engines.

Fleet vehicle

Straight trucks and trailers used in commercial fleets.

Recreational vehicle

Vehicles used for personal pleasure, such as campers, motor homes and trailers, that are not used in connection with any commercial or business enterprise. 3M specifically excludes watercraft from this definition.

Watercraft

Watercraft intended for personal pleasure such as runabouts and speedboats having aluminum and/or smooth fiberglass/gel coat bodies, including boats used in fishing tournaments and off-shore racing boats, but not other boats used in connection with commercial or business enterprise. 3M specifically excludes all other recreational vehicles from this definition.

Standard vehicle

Buses, vans, automobiles, recreational vehicles unless otherwise noted.

Indoor and Outdoor

Refers to graphics for signs used indoors or outdoors.

Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by all of the following.

- Correct combination of 3M-recommended graphics products.
- Ink formulation
- Adequate ink drying or curing
- Selection and preparation of the substrate
- Surface texture
- Application methods
- Angle and direction of sun exposure
- Environmental conditions
- Cleaning or maintenance methods

Application Outside the U.S.

Contact the 3M organization for that country.

Graphics Made with Components Not Sold or Recommended by 3M

The 3M™ MCS™ Warranty does not cover finished graphics made with other manufacturers' inks, film, graphic protection and/or application tapes. The user is solely responsible for the graphic appearance, performance and durability of graphic constructions that include non-3M graphic products.

Application to Glass

3M accepts no liability for glass breakage when using this film for window graphics. See Instruction Bulletin 5.1 for details.

Graphic Protection

Any graphic exposed to abrasive conditions (including vehicles), harsh cleaners or chemicals must include graphic protection in order to be warranted. Abrasion damage and gloss loss are not covered.

Screen Printing

Formulations and processing conditions can affect ink durability. Refer to the Product and Instruction Bulletins for your ink for limitations and proper usage.

Graphic protection can improve the appearance, performance and durability of your graphic. A clear coat also prevents chalking on unprinted films.

Whether you apply screen print clears with traditional screening methods or roller coating, use equipment designed to handle high viscosity materials and make sure the coating is evenly applied to the specifications in the clear's Instruction Bulletin.

Graphics Manufacturing



Before using any equipment, always follow the manufacturers' instructions for safe operation.

Cutting

The following are common cutting methods for this film. See Instruction Bulletin 4.1 for details.

- Bandsawing
- Hot kiss cutting
- Hot and cold steel rule
- Drum-type electronic cutting
- Flat-bed electronic cutting
- Guillotine
- Hand cut
- Cold and hot steel-rule die cutting

Size of Cut Text

These values are based on upper case Helvetica medium type. Weeding can be more difficult with smaller text.

Minimum stroke width: 0.25 inch (6.35 mm)
Minimum height: 3.0 inch (76.2 mm)
Minimum radius for end of stripe: 0.125 inch (3.18 mm)

Graphic Protection

Graphic protection can improve the appearance, performance and durability of your graphic.

Application Tapes

When to Use Premasking Tape

- As an application aid to increase stiffness, and prevent stretching and damage during application.
- When little or no liner is exposed.

When to Use Prespacing Tape

- Hold cut and weeded letters or graphics in registration after removing the film liner.
- Protect cut graphic parts from scratching or damage during application.
- Use when large amounts of liner are exposed.

How to Select a Tape

Determine whether you want to premask the graphic or prespace cut pieces of film such as letters. Then locate the graphic protection on your graphic in the table below, and use the corresponding tape. See Instruction Bulletin 4.3 for complete details.

EXAMPLE: If the film is protected by clear 1920DR and you want to premask the film, use premasking tape SCPM-3.

Tape	Graphic Protection					
	No Graphic Protection		Refer to the Warranty tables on pages 4 to determine which Graphic Protection options are approved for your ink series.			
	Unprinted	Ink Series 9800 only	1920DR	1930	9720i	9800CL
Premasking SCPM-3	■		■	■		
Premasking SCPM-44X		■			■	■
Prespacing SCPS-2 <i>film 180 only</i>	■		■	■		
Prespacing SCPS-55 <i>Films 180C, 180Cv2 only</i>	■	■	■	■	■	■
Prespacing SCPS-53X		■			■	■

Application and Installation

Adhesive

All Films in this Bulletin

Install the film using the dry application method.

Refer to the 3M Related Literature section, located at the end of this bulletin, for a list of the Instruction Bulletins that may be needed to apply or install this film.

This film has a pressure-activated adhesive that allows the film to slide easily on the substrate, be positioned with light finger pressure, and repositioned if it is not in the right place. However, by design so that a good adhesive bond is established, the positionability feature is lost when firm pressure with a squeegee or other application tool is applied, at application temperatures above 100°F (38°C) even if only light finger pressure was used for tacking, and if any part of the film is removed from the original liner and reapplied to the same or another liner.

Solvent from piezo inkjet ink that has not completely dried also affects slideability and positionability.

Films 180C and 180Cv2 with Comply™ Adhesive

These films also have air release channels, a characteristic of Comply adhesive. Removing and attempting to change liners or reapply the same liner damages air release channels.

Always work from the center out to the edges of the graphic to allow trapped air to exit through the air release channels. If the channels are closed off by firm pressure and air is trapped, use an air release tool to aid in removing air bubbles. See Instruction Bulletin 5.4 for details.

Films 180

Always work from the center out to the edges of the graphic to minimize trapped air. Use an air release tool to aid in removing air bubbles. See Instruction Bulletin 5.4 for details.

Finishing

Vehicle, indoor and outdoor graphics. These films may require edge sealing. Applications such as rail cars may benefit from using edge sealer 3950 when subject to external sources such as abrasion and/or power-washing.

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline.)

Removal

A chemical remover system is available for graphics printed with solvent-based ink. Follow the procedures in Instruction Bulletin 6.5 for using film remover R-221 and adhesive remover R-231 and for additional removal details.

Shelf Life, Storage and Shipping

Shelf Life

Total shelf life: 2 years

Up to 2 years unprocessed, **OR** process within 1 year **and** apply within 1 year of processing

Storage Conditions

- 40° to 100°F (4° to 38°C)
- Out of sunlight
- Clean dry area
- Original container
- Bring the film to print room temperature before using

Shipping Finished Graphics

Flat, or rolled printed side out on 5 inch (13 cm) or larger core. This helps prevent the application tape, if used, from popping off.

Health and Safety



When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information. To obtain MSDS sheets for 3M products go to 3M.com/MSDS, or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

3M Related Literature

Before starting any job, be sure you have the most current Product and Instruction Bulletins.

The information in 3M Product and Instruction Bulletins is subject to change. Current Bulletins are available at 3Mgraphics.com. The following applicable Bulletins provide information and processes you need to properly make the graphics described in this Bulletin. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Bulletin types: PB = Product Bulletin; PB-IB = Product & Instruction Bulletin; IB = Instruction Bulletin

Subject	Type	Bulletin No.
3M™ Screen Print UV Gloss Clear 9720i	PB-IB	9720i
3M™ Screen Print Gloss Clear 9720UV and Matte Clear 9730UV -Applying screen printing clear 9720UV or 9730UV	PB IB	9700 3.4
3M™ Screen Printing Ink Series 1900 and Overprint Clear VI0402 - Screen printing with ink series 1900 - line color - Screen printing with ink series 1900 - 4-color	PB IB IB	1900 3.12 3.11
3M™ Screen Printing UV Ink Series 9800 - Screen printing with UV ink series 9800 - line color - Screen printing with UV ink series 9800 4-color	PB IB IB	9800 3.20 3.21
Design of graphics	IB	2.1
Scoring and cutting	IB	4.1
Using 3M application tapes; premasking and prespacing for films	IB	4.3
Application, substrate selection, preparation and substrate-specific application techniques	IB	5.1
Application, special applications and vehicles	IB	5.4
Application, general procedures for indoor and outdoor dry applications	IB	5.5
Applicator's quick reference guide for vehicle film	IB	5.35
Application techniques for automobiles, vans and buses, and inspection forms	IB	5.36
A guide to understanding and applying graphics to common indoor and outdoor wall surfaces	IB	5.37
Application: special considerations for watercraft	IB	5.42
Storage, handling, maintenance, removal	IB	6.5
3M Graphics Center Warranty Brochure	Go to www.3Mgraphics.com , Warranties	

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Bulletin Change Summary

Clear 9720i is now offered as an alternative to clear 9720UV. This bulletin replaces Product Bulletin 180 and Product Bulletin 180C.



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