

Product Description

Product Features

- Dual cast vinyl film in an array of colors (see “Colors” on page 3)
- Use the film right out-of-the-box with or without graphic protection
- Pressure-activated adhesive for easy sliding, tacking, snap up and repositioning
- Non-visible, air release channels for fast, easy, bubble-free installations
- Available in 60 inch rolls—allowing almost any section of the vehicle to be wrapped without seams
- Removable with heat and/or chemicals.
- Expected Performance Life (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, vehicle surface):
 - 7 years

Quick Links

[3M Graphics Warranties](#)
[Technical Information](#)
[Safety Data Sheets \(SDS\)](#)
[Flammability \(ASTM E84 Reports\)](#)
[Videos](#)

Some of these links lead to web-based resources that are not product-specific.

Recommended Types of Graphics and End Uses

- Solid color vehicle detailing
- Standard vehicle graphics, detailing and decoration, multiple layers of graphics
- Commercial vehicle and fleet graphics, emblems or striping
- Watercraft graphics applied above the static water line only

See [3M.com/graphicswarranties](https://www.3m.com/graphicswarranties) for a complete list of compatible products that are approved by 3M for use with the base film covered in this Bulletin and used for the creation of a graphic that may be eligible for the 3M™ MCS™ Warranty.

IMPORTANT NOTE

Before using these films, please review “Handling Films” on page 7.

Graphic Protection

- [3M™ Wrap Overlaminate Series 8900](#)

Characteristics

These are typical values for unprocessed product. Processing may change the values.

Physical Characteristics

Characteristic	Value	
Material	Vinyl, cast	
Colors	See "Colors" on page 3. Note: The opacity of these films vary and should be considered when installing.	
Thickness	These values apply to 1080-M12. Designs vary slightly in thickness. Without adhesive: 3.5 mil (0.09 mm) With adhesive: 4.5 mil (0.11 mm)	
Adhesive	Pressure-activated, slideable, repositionable, air release channels	
Adhesive Color	Gray*	
Liner	Polyethylene-coated paper	
Adhesion, Typical 24 hours after application	Substrate:	Adhesion:
	ABS	4 – 5 pounds/inch (0.72 – 0.89 kg/cm)
	Acrylic enamel	3 – 4 pounds/inch (0.54 – 0.72 kg/cm)
	Automotive clear coats (OEM)	3 – 5 pounds/inch (0.54 – 0.89 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	ASTM E84 test report: click here or go to the On-line Catalog at 3M.com/graphics.com All available test reports: call 1-800-328-3908	

*NOTE: Gray adhesive color may be darker or lighter depending on the film color.

Application Characteristics

Characteristic	Value
Finished Graphic Application Recommendation	Surface type: Flat, simple curves, moderate compound curves Substrate type: ABS resins, chrome, glass, paint (check adhesion to power-coated or water-based paints) fiberglass with gel coat Application Temperature: 60 – 90 °F (16 – 32 °C) Application Method: Dry
Applied Shrinkage	0.015 inches (0.4 mm)
Temperature Range After Application	-65 to +225 °F (-60 to +107 °C) (not for extended periods of time at the extremes)
Graphic Removal	Removable with heat and/or chemicals from most substrates within the Expected Performance Life at 50 °F (10 °C) minimum (air and substrate)

Colors

Gloss



Warranty Information

Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics Product and Instruction Bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time that the film was purchased. Information found at 3M.com/graphicswarranties includes:

- [3M Graphics Warranties Bulletin](#)
 - This bulletin contains information on limitations and exceptions, and warranty period reductions for 3M Graphics Warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this Bulletin.
- [3M Graphics Warranties Selector](#)
 - Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/printer platform.
- [U.S. Desert Southwest Region Map](#)
 - Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.

The warranties set forth in this Bulletin are made in lieu of all other express or implied warranties, including any implied warranty of merchantability, fitness for a particular purpose, or arising out of a course of dealing, custom, or usage of trade.

3M Basic Product Warranty

3M Graphics Products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in its applicable 3M Graphics Product Bulletin and as further set forth in the [3M Graphics Warranties Bulletin](#).

Limited Remedy

The limited remedy applicable to each warranty is addressed in the 3M Graphics Warranties Bulletin found at 3M.com/graphicswarranties.

Limitation of Liability

Except to the extent prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT (EXCEPT FOR THE LIMITED REMEDY PROVIDED HEREIN), INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LABOR, NON-3M MATERIAL CHARGES, LOSS OF PROFITS, REVENUE, BUSINESS, OPPORTUNITY, OR GOODWILL) RESULTING FROM OR IN ANY WAY RELATED TO 3M'S GRAPHICS PRODUCTS, SERVICES, OR THIS BULLETIN. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought.

NOTE: Refer to the 1080-GC451 Product Bulletin for Chrome warranty information.

U.S. Vertical Exposure

Table A. 3M™ MCS™ Warranty - Unprinted Film in a U.S. Vertical Exposure

Film Series 1080	With Graphic Protection
3 years*	None
3 years*	8900

* U.S. Vertical Exposure in years

U.S. Horizontal Exposure

Table B. 3M™ MCS™ Warranty - Reduced Warranty Period for U.S. Horizontal Exposure

Use this Percentage of U.S. Vertical Exposure, Warranty Period	Calculation Example
35% (0.35)	0.35 x 3 years = 1.05 years

U.S. Horizontal Desert Southwest Exposure

Table C. 3M™ MCS™ Warranty - Reduced Warranty Period for U.S. Horizontal Exposure

Use this Percentage of U.S. Vertical Exposure, Warranty Period	Calculation Example
0% (0)	0 x 3 years = 0 years

Additional Limitations

See the 3M Graphics Warranties Bulletin at 3MGraphics.com/warranties, for terms, additional limitations of your warranty, if any, information on reduced warranties for different exposures, and limitations of liability.

Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by:

- selection, condition and preparation of the substrate.
- surface texture.
- application methods.
- angle and direction of sun exposure.
- environmental conditions.
- cleaning or maintenance methods.

Graphics Manufacturing

CAUTION

Before using any equipment, always read the manufacturer's instructions for safe operation.

Layout Considerations for Graphic Panels

Take into account these considerations when planning your graphic layout:

- Textured, metallic, pearl, and color flip films may have a directional characteristic in their appearance. For the best overall appearance, do not alternate between lengthwise and widthwise graphic panels.
- Film colors can vary from lot-to-lot. For consistent looking color, use the same lot number of film for an entire vehicle.

Cutting

See [3M Instruction Bulletin 4.1](#) for Sheeting, Scoring and Film Cutting details.

IMPORTANT NOTE

The thickness and texture of this film makes it more difficult to cut and weed cleanly. Use clean, sharp, properly aligned blades. The user must assume responsibility of the outcome, so always test and approve before cutting a large job.

Application Tapes

There are two types of application tapes. See [3M Instruction Bulletin AT-1](#) to determine what application tape is recommended for your film or finished graphic.

Premasking Tape

Increases stiffness during application while preventing stretching and damage. Use when little or no liner is exposed. See [3M Instruction Bulletin 4.3](#) for complete details.

Prespacing Tape

Holds cut and weeded letters or graphics in place during application and after removing the film liner, while preventing stretching and damage. Use when large amounts of liner are exposed. See [3M Instruction Bulletin 4.3](#) for complete details.

IMPORTANT NOTE

The texture on certain films in the film series 1080 makes it difficult for any application tape to adhere to the film. If used, apply the graphic as soon after cutting and applying an application tape as possible. Always test and approve before committing to a job. See [3M Instruction Bulletin 4.3](#) for complete details.

Application and Installation

IMPORTANT NOTE

Never use a wet application method to apply this film.

In addition to other 3M Bulletins specified in this document, the following Bulletins provide details that you may need to successfully apply a graphic.

- [3M Instruction Bulletin 5.36](#). Application Techniques for Automobiles, Vans and Buses. Complete the 3M Pre-Installation Inspection Record found in this Instruction Bulletin prior to manufacturing or applying a graphic to an automobile, van, or bus.
- [3M Instruction Bulletin 5.4](#). Application, Fleet Trucks.
- [3M Instruction Bulletin 5.42](#). Application, Special Considerations for Watercraft. Complete the 3M Pre-Installation Inspection Record found in this Instruction Bulletin prior to manufacturing or applying a graphic to a watercraft.
- [3M Product and Instruction Bulletin V-Tools](#). 3M™ Vehicle Channel Applicator Tools.
- [3M FAQ Vehicle Care](#). 3M™ Vehicle Care Frequently Asked Questions.
- [3M FAQ 1080 for Wrap Shops](#). 3M™ Vehicle Care Frequently Asked Questions.
- [3M FAQ 1080 for Consumers](#). 3M™ Vehicle Care Frequently Asked Questions.

Heating and Stretching the Film

This film can be stretched up to 130% (i.e., a 10 inch film piece can be stretched to 13 inches). See [3M Instruction Bulletin 5.36](#) for more details.

Handling Films

- Align the graphic using masking tape, never a grease pencil.
- Use a felt squeegee for installing the film to minimize scratching.
- Use a heat gun instead of a torch, when heat is needed. A torch may alter the appearance of the finish.

Pressure-activated Adhesive

The pressure activated adhesive on this film offers:

- smooth sliding into position on a substrate;
- fast finger tacking to check position; and
- easy snap-up and repositioning when you need it.

The snap-up and reposition 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.
- if any part of the film is removed from the original liner and reapplied to the same or another liner.

Working with Air Release Channels

Air release channels are a characteristic of films with Comply™ adhesive that allow trapped air to exit through the edges of the graphic.

- The channels will be damaged and effective air removal affected if you remove and attempt to change liners or reapply the same liner.
- For the best results, 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 [3M Instruction Bulletin 5.4](#) for details.

Video

Click [here](#) to see how 3M's Comply™ adhesive technology works.

3M™ Tape Primer 94

3M recommends that where the film will be stretched, particularly on the edges of the film, use primer to maximize a graphic's bond to its substrate.

IMPORTANT NOTE

Consult air quality regulations before using 3M™ Tape Primer 94.

Maintenance and Cleaning

Use care to avoid scratching the film. Never scrub the film. Scratching and abrasion marks may be visible and you may not be able to work them out of the unique finish of the film. Avoid using harsh chemicals and brushes when cleaning your vehicle, and avoid parking near shrubs and trees or any other items that could scratch the vehicle. See [3M FAQ Vehicle Care](#) for details.

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See [3M Instruction Bulletin 6.5](#) for details.

IMPORTANT NOTE

Do not apply waxes or polishes to the Matte, Satin, Carbon Fiber, Straight Fiber or Brushed Metal Texture finishes.

Removal

Removal requires heat and/or chemicals. 3M makes no claims as to the ease or speed of removal. This product may not remove similarly to other products in the same category. See [3M Instruction Bulletin 6.5](#) for details.

Using the 3M™ Wrap Film Series 1080 Emblem



This Emblem may be placed on the wrapped surface of your 3M™ Wrap Film Series 1080 installation or used in your marketing collateral. Please review and follow these [guidelines](#) to help ensure that each and every exposure to the Emblem is positive, and that you maintain a clear and consistent identity in the minds of your customers and potential customers.

Shelf Life, Storage and Shipping

Shelf Life

The shelf life is **never more than 3 years** from the date of manufacture on the original box.

If you process the film, the shelf life is changed to **1 year** from the processing date, but not later than the 3 year maximum from the manufacturing date.

Storage Conditions

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

Shipping Finished Graphics

Flat, or rolled printed side out on 6 inch (15 cm) or larger core. This helps prevent the application tape, if used, from popping off.

Health and Safety

CAUTION

When handling any chemical products, read the manufacturers' container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to 3M.com/SDS, 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 manufacturer's instructions for safe operation.