

Product Description

- Multi-layer cast adhesive backed film for solid color vehicle detailing, decoration and full wraps
- This film utilizes 3M™ Controltac™ and 3M™ Comply™ technology
Controltac™ minimizes the initial contact area of the adhesive for easy sliding, tacking, snap-up and repositioning
Comply™ technology allows air to exit through air release channels to the edge of the graphic
- 60 inch (1.52 m) rolls—allowing almost any section of the vehicle to be wrapped without seams
- Excellent hiding power
- Expected Performance Life (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface under Northern European climate conditions):







All colors and textures: 4 years

Note: This document uses hyperlinks. Please follow the links for additional information.

Recommended types of graphic and use

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

Surface types

flat	rivets	simple curves	compound curves	corrugations	deep channels and recesses
✓	✓	✓	✓	✓	
					

Product line

Product name	Description	Features
3M™ Wrap Film Series 1080-X	X = color code, opaque. Various colors and surfaces.	Controltac™ and Comply™

[Follow the link to see color card of this series.](#)

[See product bulletin 3M™ Wrap Film 1080-GC451 for Gloss Silver Chrome.](#)

Recommended Compatible Products

See instruction bulletin 'AT-1' for information about selection and use of suitable application tapes for this product, please.

Follow the link 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 or 3M Performance Guarantee.

Physical Properties

The values displayed are the results of illustrative lab test measures made according to the indicated external norm and shall not be considered as a commitment from 3M.

Characteristic	Value	
Material	Cast vinyl	
Thickness	Film without adhesive:	0.09 ± 0.01 mm
ISO 534	Film with adhesive:	0.11 ± 0.015 mm
Adhesive	Acrylic pressure-sensitive, repositionable	
Adhesive appearance	Grey or clear, dependent on film color	
Adhesion		
Indicative values FTM 1, 24 h 23°C/50%RH	Aluminum	11 N/25 mm
Applied shrinkage FTM 14	< 0.4 mm	
Liner	Polyethylene-coated paper	
Application method	Dry only	
Substrate types	Aluminum, chrome, glass, ABS, paint**, gel-coated fiberglass The application of film onto glass can cause glass break by uneven heat absorption through sun exposure. 3M does not accept liability for glass breakage. ** Check adhesion to powder-coated or water-based paints	
Application temperature	16 – 32°C	All surface shapes
3M recommends application at +18°C to +22°C for optimum ease of application.		
Temperature range after application	-53 to +107°C (not for extended periods of time at the extremes)	
Chemical Resistance	<ul style="list-style-type: none"> • Resists mild alkalis, mild acids, and salt • Excellent resistance to water (does not include immersion) • Resists occasional fuel spills 	
Flammability	Flammability standards are different from country to country. Ask your local 3M contact for details, please. <u>Follow the link to check for available fire certificates.</u>	

Adhesive Characteristics

3M™ Wrap Film Series 1080-X		1	2	3	4	5	
Installation Characteristics	Challenging/High Skill						Easy/Low Skill
24-hour adhesion	Low						High
Long term adhesion	Low						High
Removability	Not Designed for Easy Removal						Designed for Easy Removal

Warranty Information

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.

3M™ Performance Guarantee and MCS™ Warranty

3M provides a guarantee/warranty on a finished applied graphic within the framework of 3M™ Performance Guarantee and/or 3M™ MCS™ warranty programs.

[Follow the link 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 or 3M Performance Guarantee.](#)

Limited Remedy

Unsuitable End Uses

3M recommended product end uses are listed in each 3M graphics product bulletin. End uses not listed in the applicable 3M Graphics Product Bulletins are typically not eligible for 3M Graphics Warranties. For non-recommended and/or non-warranted end uses or applications, users must test and approve the end uses or applications, assume any associated risks, and acknowledge that 3M has no liability for such end uses or applications. Please contact your 3M representative with any questions about graphic applications, end uses, and warranties.

Limitations of liability

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

3M Commercial Solutions products are not tested against automotive manufacturer specifications!

Graphic Manufacturing

Vehicle wrapping

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.

To maximize a graphic's bond to the substrate 3M recommends to use 3M™ Tape Primer 94 in areas that will be partly stretched, particularly on the edges of the film.

Films require high squeegee pressure to avoid air entrapment between film and substrate. Therefore the use of 3M™ PA-1 Gold Squeegee with thin and soft sleeve (e.g. microfibre) is recommended. Wetting of sleeves helps to avoid scratches on film surface during application. Please refer to [3M Instruction Bulletin 1080](#) for detailed information.

Post-heating of edges is required at temperatures of at least +85°C.

1080 Carbon Fiber and Brushed may tear at higher temperatures if being slightly stretched. Therefore, heating temperatures for these films should not be higher than +40°C to +50°C.

Stretching of film at the edges should be avoided in order to avoid shrinkage and color fading.

Excessive heat and stretch of light colors might result in change of gloss and colors. Stretching of textured films (e.g. 1080-MX Matrix Black) may lead to distortion of the pattern.

Application on corrugations should be done by following the shape without stretching the film. Inlays and relief cuts in deep recesses are recommended.

Surfaces with high surface tension as e.g. car glass should be covered by masking or application tape in order to prevent adhesive residuals when removing the film from the substrate. Removal with slow speed and peel angle < 90° is preferred.

Color appearance of 1080 metallic films applied on the car might slightly change when applied on differently colored car paints.

To avoid color variations all pieces of applied film of one colored area should be processed out of the same roll of material. If more than one roll is needed for the application, material should be taken from the same lot.

Check material on color consistency before application. Color deviations of different lots or from different manufacturing sites cannot be excluded.

It is recommended to apply 1080 metallic films and 1080 satin pearl films in same direction on visually adjacent car parts as e.g. doors and fenders of car body sides.

Sheeting, Scoring and Film Cutting

See 3M Instruction Bulletin 4.1 for Sheeting, Scoring and Film Cutting details.

Application and Installation

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

[See 3M Instruction Bulletin 1080](#)

See 3M Instruction Bulletin 5.42 for application and special considerations for watercrafts.

See 3M Instruction Bulletin 5.5 for general procedures for interior and exterior dry application.

[See 3M Instruction Bulletin Cleaner for Matte Wrap Films](#)

See 3M Instruction Bulletin 6.5 for information about storage, handling, maintenance and removal of films and sheetings.

[See 3M videos](#)

Maintenance, Cleaning and Removal

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).

These films can be removed with the aid of heat and/or chemicals.

See 3M Instruction Bulletin 6.5 for information about storage, handling, maintenance and removal of films and sheetings.

If available in fully automated car washes, polishing rollers should be disabled to avoid high pressure contact and potential damage of the film. The use of wax is not recommended. Matte colors might become glossy if brushed and waxed in car washes.

1080-M10 Matte White and 1080-CFS Carbon Fiber White require frequent cleaning. The use of [3M™ Cleaner for Matte Wrap Films](#) is recommended.

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.

Shelf Life, Storage and Shipping

The shelf life as defined below remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.

The shelf life is never more than 2 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 2-year maximum from the manufacturing date.

Storage conditions: +4°C to +40°C, out of sunlight, original container in clean and dry area.

Shipping finished graphics: Flat or rolled printed side out on 6 inch (15 cm) or larger core.

Health and Safety

When handling any chemical products, read the manufacturer's container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information.

[Follow the link to obtain SDS sheets for 3M products on 3M.com/SDS.](https://www.3m.com/SDS)

IMPORTANT! When using any equipment, always follow the manufacturer's instructions for safe operation.

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