



3M™ Wrap Film Series 1080

Product Description

3M Wrap Film Series 1080 are long-term, removable, dual cast films designed for solid colour vehicle detailing, decoration and full wraps and provide excellent opacity to hide high-contrast surfaces

This film's pressure-activated 3M™ Controltac™ adhesive, which is unique to 3M contains microscopic glass beads, which lie on the surface of the adhesive. This feature allows for the films to be slid across the substrate and be repositioned until the exact registration is achieved. As soon as firm squeegee pressure is applied, the glass beads are pushed into the adhesive, giving an instant bond, which needs no curing time.

Series 1080 also benefits from 3M™ Comply™ Adhesive non-visible air release channels to give fast, easy and virtually bubble-free installations. These vinyl films (minimum thickness of 90 microns) are sold in 1.54m width rolls, allowing almost any section of a vehicle to be wrapped without joins.

Recommended Types of Graphics and End Uses

- Standard vehicle graphics, detailing and decoration
- Commercial vehicle and fleet graphics, emblems or striping

Limitations of End Uses

This 3M film is not designed or recommended for the following uses. Please contact us to discuss other options.

Film applied to:

- low surface energy substrates or substrates with low surface energy coating
- stainless steel
- non-3M films
- Non-OEM painted substrates on most vehicles
- 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)
- cut and weed applications where the application tape must adhere to the exposed liner
- graphics subjected to regular petroleum vapours or spills

Graphic removal from

- signs or existing graphics that must remain intact
- vehicles which do not have the original OEM paint applied
- surfaces with poor paint to substrate adhesion

Important Notice

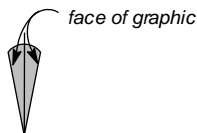
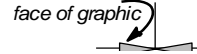
- 3M Commercial Graphics Division products are not tested against automotive manufacture specifications
- Non-vertical applications will have a significant decrease in durability
- For water craft/marine applications please consult your 3M representative

Characteristics

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

Physical Characteristics 3M™ Wrap Film Series 1080		
Characteristic	Value	
Film	Vinyl, cast	
Product Range	<p>Smooth Gloss Texture 1080-G83 Gloss Dark Red 1080-G13 Gloss Hot Rod Red 1080-G103 Gloss Hot Pink 1080-G14 Gloss Burnt Orange 1080-G54 Gloss Bright Orange 1080-G25 Gloss Sunflower Yellow 1080-G15 Gloss Bright Yellow 1080-G46 Gloss Kelly Green 1080-G47 Gloss Intense Blue 1080-G77 Gloss Sky Blue 1080-G79 Gloss Ivory 1080-G10 Gloss White 1080-G12 Gloss Black 1080-G203 Gloss Red Metallic * 1080-G227 Gloss Blue Metallic * 1080-G217 Gloss Steel Blue Metallic* 1080-G241 Gloss Gold Metallic * 1080-G120 Gloss White Aluminium * 1080-G251 Gloss Sterling Silver * 1080-G201 Gloss Anthracite * 1080-G211 Gloss Charcoal Metallic* 1080-G212 Gloss Black Metallic *</p> <p>* These are metallic colours.</p> <p>Carbon Fibre Texture 1080-CF12 Carbon Fibre Black 1080-CF201 Carbon Fibre Anthracite * 1080-CF10 Carbon Fibre White</p>	<p>Matt or Satin Texture 1080-SP10 Satin Pearl White 1080-120 Satin White Aluminium 1080-S10 Satin White 1080-S12 Satin Black 1080-M12 Matt Black 1080-M22 Matt Deep Black 1080-M261 Matt Dark Grey * 1080-M21 Matt Silver * 1080-M230 Matt Grey Aluminium * 1080-M10 Matt White 1080-M15 Matt Yellow 1080-M54 Matt Orange 1080-M103 Matt Pink 1080-M13 Matt Hot Rod Red 1080-M38 Matt Royal Purple 1080-M227 Matt Blue Metallic * 1080-M196 Matt Apple Green 1080-M26 Matt Military Green 1080-M 27Matt Dark Navy</p> <p>Brushed Metal Texture 1080-BR212 Brushed Black Metallic * 1080-BR201 Brushed Steel * 1080-BR230 Brushed Titanium * 1080-BR120 Brushed Aluminium * 1080-BR241 Brushed Gold * 1080-BR217 Brushed Blue Steel *</p>
Adhesive colour	Grey	
Thickness	Value for 1080-M12 given; other films may vary Without adhesive: 90 microns With adhesive: 110 microns	
Adhesive	Solvent acrylic, pressure-activated, repositionable, air release channels	
Liner	Polyethylene-coated paper	
Adhesion, Typical 24 hours after application	Substrate	Adhesion
	ABS	19 N/25 mm
	Acrylic enamel Automotive clear coats (OEM)	16 N/25 mm 13 N/25 mm – 22 N/25 mm
Tensile strength	22 N/25 mm at 23° C	
Chemical resistance	-Resists mild alkalis, mild acids, and salt -Excellent resistance to water (<i>does not include immersion</i>) -Resists occasional fuel spills	
Storage Conditions	+4°C to +38°C out of sunlight in original packaging, in clean and dry area. Bring the film to room temperature before using.	
Shelf Life	Total shelf life: 3 years from the date of manufacture on the original packaging. Install immediately after cutting and applying application tape (if used)	

Application Characteristics

Characteristic	Value
Suitable Substrates	Surface type: Flat, simple curves, moderate compound curves typical to private cars Substrate type: ABS resins, chrome, glass, paint (check adhesion to powder-coated or water-based paints) fibreglass with gel coat
Application temperature	16°C to 32°C (60 -90°F) air and substrate
In use temperature range	-60° to +107°C (-65° to +225°F)
Application method	Dry only
Applied shrinkage	< 0.4 mm (0.015 inches)
Graphic Removal	Removable with heat and/or chemicals from most substrates within the warranty period at 10°C (50°F) minimum (air and substrate)
Durability/Expected Performance Life for Zone 1: Northern Europe, Italy (North of Rome) and Russia	5 years for vertical applications 3 years for horizontal applications For programmes requiring a 3M™ MCS™ Warranty, please contact your 3M representative.
Definitions - Exposure Types	
Vertical	 <p>The face of the graphic is +/- 10° from vertical.</p>
Horizontal	 <p>The face of the graphic is +/- 5° from horizontal.</p>

Graphic Manufacture

Shipping Finished Graphics	Flat, or rolled colour-side-out on a 15cm (6 inch) or larger core. This helps prevent the liner from wrinkling or application tape (if used), from popping off.
Important Information	<p>The thickness and texture of series 3M™ Wrap Film Series 1080 makes it more difficult to cut and weed cleanly. Always use clean, sharp, correctly aligned blades. It is the user's responsibility to ensure the best outcome and should therefore test and approve before completing a large job.</p> <p>The texture of film series 1080 affects the adhesion of application tapes. If application tape is to be used, apply to the graphic immediately after cutting. The user should test and approve the use of application tape before committing to a job.</p> <p>3M™ Prespacing Tape SCPS-55 can be used for applying large or weeded graphics. The user should be aware, that, although SCPS-55 will adhere to the face of series 1080 films, it will not adhere to the exposed liner.</p> <p>The user should test on a job-by-job basis.</p>
Graphic Application	First, ensure that the substrate/vehicle is freshly washed and dried. Solvent wipe and dry using 3M™ Surface Preparation System to remove any surface contamination prior to application.
Important	Never use a wet application method for series 1080.
Important	Certain film colours, such as satin pearl white, metallic and the brushed metal patterns, have a directional characteristic in their appearance. For the best overall results, do not alternate between lengthwise and widthwise graphic panels. Additionally, for satin pearl white, do not rotate the film by 180 degrees; use the same orientation between panels. NB: film colours can vary slightly from lot to lot. For the most consistent looking wraps, use film from the same roll, or manufacturing lot number, for an entire vehicle.

Maintenance & Cleaning	<p>Maintenance: Care must be taken to avoid scratching the film. Avoid using harsh chemicals and brushes when cleaning your vehicle and avoid parking near shrubs and trees or any other items than could scratch the vehicle.</p> <p>It may be possible to reduce the appearance of fine scratches by heating with a heat gun/hair dryer to approx. 50°C often makes them disappear. Keep the heat gun moving, do not aim the heat at a single spot for a long time. Sometimes fine scratches will disappear when the car gets hot when parking in direct sunlight.</p> <p>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). Rinse thoroughly after cleaning and dry with a clean, soft cloth or soft rubber squeegee to avoid water spots.</p> <p>Do not apply waxes or polishes to these films. If there is wax and/or wax residue on the surface, remove with an all-purpose cleaner. To help restore the film's finish, clean the film with isopropyl alcohol and water (ratio 2:1).</p> <p>Refer to instruction bulletin 6.5 Storage, Handling, Maintenance and Removal of films and Sheetings," for general maintenance and cleaning information.</p>	
Graphic Removal	<p>Removable with heat and/or chemicals from most substrates within the warranty period at 10°C (50°F) minimum (air and substrate)</p> <ul style="list-style-type: none"> • Use a removal angle of <90° for optimal results • No liability is given for ease or speed of removal of any graphic. 	
3M Related Literature	Subject	Bulletin No.
	<i>Design of graphics</i>	2.1
	<i>Scoring and cutting</i>	4.1
	<i>Using 3M application tapes; premasking and prespacing for films</i>	4.3
	<i>Application, substrate selection, preparation and substrate-specific application techniques</i>	5.1
	<i>Application, special applications and vehicles</i>	5.4
	<i>Storage, handling, maintenance, removal</i>	6.5
<p><i>3M, Controllac, Comply, and MCS are trademarks and Scotchprint is a registered trademark of 3M Company.</i></p>		

Health & Safety

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department on 01344 858000.

Important Notice to Purchaser

The 3M products described in this publication are covered by a 3M warranty and limitation of liability.

3M's warranty provides that if 3M finds that goods are defective in material or workmanship they will be replaced or the price refunded at 3M's option but note that 3M does not accept liability for other direct losses (except for personal injury or death) or consequential losses relating to defective products or from information supplied by 3M.

Purchasers and users of 3M products, and not 3M supplying companies, are always solely responsible for deciding on the suitability of the 3M product for their required or intended use.

Commercial Graphics Department
3M United Kingdom PLC
3M Centre, Cain Road, Bracknell, Berkshire
RG12 8HT
Tel: 01344 857850
Fax: 01344 857939
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions

Commercial Graphics Department
3M United Kingdom PLC
3M House, 28 Great Jackson Street
Manchester M15 4PA
Tel: 0161 237 6394
Free Fax: 0800 378127
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions

Commercial Graphics Department
3M Ireland (Dublin)
The Iveagh Building
The Park, Carrickmines, Dublin 18, Ireland
Tel: 00 353 1 280 3555
Fax: 00 353 1 280 3509
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions

Questions and Answers for 3M™ Wrap Film Series 1080

1. **Can I use an overlaminate?**

3M does not recommend or warrant using an overlaminate or clear coat on this film, which has an inherent texture that can be altered by an overlaminate. Customers may use only on a test-and-approve basis and where they are ready to assume all risk.
2. **Can I print on film series 1080?**

3M does not recommend or warrant printing on this film. If printed, an overlaminate would provide protection for the ink, but could alter the appearance of the film. Customers who choose to print on the film must do so on a test-and-approve basis and assume all risk.
3. **Are stripes in carbon fibre Films normal?**

Yes. All films in this series have some texture that is integral in creating these unique looks. The carbon fibre films have the most texture, which appears to have more depth, or texture, in certain lighting conditions, giving a striped look.
4. **Installation tools**
 - A. **Masking tape**

Always use masking tape to mark alignment. Do not use a grease pencil, which will embed in the film's texture, and attempting to remove it may damage the texture.
 - B. **Covered squeegee**

The unique finish on film series 1080 is sensitive to scratches and requires careful handling during installation. We recommend using a 3M™ Gold Squeegee PA1-G with a 3M Cotton Sleeve, or a felt edged plastic squeegee.
 - C. **Heat gun**

A heat gun, instead of a torch, must be used. A torch is likely to alter the appearance of the finish.
5. **Do I need to use an application tape?**

This new film series features a dual cast construction that is 90 microns thick. It has just enough rigidity to allow easy installation without an overlaminate or application tape. Due to the film's texture, application tape may not work well with cut and pre spaced graphics. Customers may choose to test and approve an application tape. 3M™ Pre spacing Tape SCPS-55 is a good one to try.
6. **Can I apply film series 1080 to an older vehicle?**

All wrap films, including film series 1080, should be applied to a "like new" vehicle finish for the best results. 3M's warranty only applies to vehicles that have an excellent bond of the paint and its finish to the vehicle substrate. Any rust, bubbling, scratches, dents or other damage will be visible through the film, and such surface imperfections may damage the film or cause the film to fail.
7. **Does film series 1080 install the same way as film IJ180Cv3?**

Installation is very similar to film 3M™ Controltac™ Graphic Film with Comply™ Adhesive Series IJ180Cv3 . Film series 1080 has the same features as Controltac Films with Comply Adhesive, i.e. it is slideable and repositionable adhesive with virtually invisible air release channels. But be aware of these important differences.

 1. Align the graphic using masking tape, never a grease pencil.
 2. Use a covered or felt edge squeegee, not a hard rubber squeegee or felt pad.
 3. Use a heat gun, not a torch.
 4. After application, heat all film edges to approximately 40°C and re-squeegee.
8. **Can I wet apply film series 1080?**

No. 3M does not recommend or warrant wet installations for any film with air release channels.
9. **Will fingerprints show on the film?**

The matt product may show finger prints, but they can be cleaned off after the installation is complete by saturating a clean, lint free towel with a 2:1 mixture of Isopropyl Alcohol (IPA) and water or straight rubbing alcohol, and then wiping and drying the film.

10. Can scratches be removed?

It may be possible to reduce the appearance of fine scratches by heating with a heat gun/hair dryer to approx. 50°C often makes them disappear. Keep the heat gun moving, do not aim the heat at a single spot for a long time. Sometimes fine scratches will disappear when the car gets hot when parking in direct sunlight.

Deeper scratches will not come out. Always use care to avoid scratching during installation, maintenance, use and storage of the applied film.

11. How do I maintain the graphics?

Care for your vehicle graphics like you would any fine paint finish. Using high quality products designed specifically for car care and these cleaning and maintenance procedures will help keep your 3M vehicle graphics looking their best. See below for more details.

A. Gentle cleaning is best

- Soften difficult contaminants such as bug splatter, bird droppings, tree sap and similar contaminants by soaking them for several minutes with very hot, soapy water. Rinse thoroughly and dry. If further cleaning is needed, test one of these products in an inconspicuous area to ensure no damage to the graphics: Meguiar's Gold Class™ Bug and Tar Remover or 3M™ Citrus Base Cleaner. Isopropyl alcohol (IPA) (two parts IPA to one part water) or denatured alcohol may also help. Spot clean the contaminants. Do not use rough scrubbing or abrasive tools, which will scratch the film. Wash and rinse off all residue immediately.
- For the best results, use hand washing and a wet, non-abrasive detergent such as 3M™ Car Wash Soap 39000 or Meguiar's NXT Generation® Car Wash or Deep Crystal® Car Wash and a soft, clean cloth or sponge.
- Always rinse thoroughly with clean water. To reduce water spotting, immediately use a silicone squeegee to remove water and finish with a clean microfibre cloth.

B. Power washing is an option

- You can take the vehicle through a brushless car wash.
 - Pressure washing may be used under these conditions
 - Ensure the water pressure is kept below 2000 psi (14 MPa).
 - Keep water temperature below 80°C (180°F).
 - Use a spray nozzle with a 40 degree wide angle spray pattern.
 - Keep the nozzle at least 300 mm (1 foot) away from and perpendicular (at 90 degrees) to the graphic.
- NOTE: Holding the nozzle of a pressure washer at an angle to the graphic may lift the edges of the film.
- For the best results, hand dry as described in Item 11.A.

C. Polish or wax?

For the carbon fibre and brushed metal films in 3M™ Wrap Film Series 1080, a polishing product such as 3M™ Tire Restorer or Meguiars® Natural Shine Protectant may be used. No polish is recommended for matt or textured films, and no wax-based product is recommended for any of film series 1080. In these instances, the product tends to fill in the inherent texture of the film's surface and can cause the film to develop a haze.

D. Film series 1080 can be removed?

Film series 1080 is warranted to be removable for up to five years after installation, providing the film has not been printed and no overlaminates has been applied. Heat and/or chemicals may be required. Some adhesive residue may be left on the vehicle, which can be easily cleaned off with a product such as 3M™ Citrus Base Cleaner. Refer to 3M Product Bulletin 1080 and 3M Instruction Bulletin 6.5 for more details.

E. Removal should not cause damage?

When used, applied, maintained and removed according to 3M's instructions, film series 1080 should not damage an OEM paint finish upon removal.

F. Store the car indoors when possible?

Vinyl graphics (just like paint) are degraded by prolonged exposure to sun and atmospheric pollutants, particularly on the horizontal surfaces such as bonnet, boot lid and roof. Whenever possible, store in a garage or at least in a shaded area during the day. At night protect the car from dew or rain, which may contain acidic pollutants (a common problem in many large metropolitan areas). When a garage is not available, consider using a cloth car cover at night. If your graphics start to discolour or turn brown (which is caused by acidic pollution), immediately remove the graphics from the vehicle to avoid staining the underlying paint.



Caring for Your Vehicle Graphics

Care for your vehicle graphics like you would any fine paint finish. Using high quality products designed specifically for car care and these cleaning and maintenance procedures will help keep your 3M vehicle graphics looking their best.

1. Wash regularly

- Wash whenever the car appears dirty. Contaminants allowed to remain on the graphic may be more difficult to remove during cleaning.
- Rinse off as much dirt and grit as possible with a spray of water.
- See item 4, Difficult contaminants, for spot cleaning bird droppings, tar, etc.
- Use a wet, non-abrasive detergent such as 3M™ Car Wash Soap 39000 or Meguiar's NXTGeneration® Car Wash or Deep Crystal® Car Wash and a soft, clean cloth or sponge.
- Rinse thoroughly with clean water. To reduce water spotting, immediately use a silicone squeegee to remove water and finish with a clean microfibre cloth.

2. Automated car washes

Brush-type car washes are not recommended as they can abrade the film and cause edges to lift or chip, as well as dulling the film's appearance. Brushless car washes are acceptable.

3. Pressure washing

Although hand washing is the preferred cleaning method, pressure washing may be used under these conditions.

- Ensure the water pressure is kept below 2000 psi (14 MPa).
- Keep water temperature below 80°C (180°F).
- Use a spray nozzle with a 40 degree wide angle spray pattern.
- Keep the nozzle at least 300 mm (1 foot) away from and perpendicular (at 90 degrees) to the graphic.

Holding the nozzle of a pressure washer at an angle to the graphic may lift the edges of the film.

Important Note!

4. Difficult contaminants

Soften difficult contaminants such as bug splatter, bird droppings, tree sap and similar contaminants by soaking them for several minutes with very hot, soapy water. Rinse thoroughly and dry. If further cleaning is needed, test one of these products in an inconspicuous area to ensure no damage to the graphics: Meguiar's Gold Class™ Bug and Tar Remover or 3M™ Citrus Base Cleaner. Isopropyl alcohol (IPA) (two parts IPA to 1 part water) or denatured alcohol may also help. Spot clean the contaminants. Do not use rough scrubbing or abrasive tools, which will scratch the film. Wash and rinse off all residue immediately.

5. Fuel spills

Wipe off immediately to avoid degrading the vinyl and adhesive. Then wash, rinse and dry as in Item 1 as soon as possible.

6. Polish and wax

Most standard graphic films and overlaminates can be polished or waxed with a high quality car wax. Before use, test and approve in an inconspicuous area. Do not use any abrasive polishes or cutting compounds. For the carbon fibre and brushed metal films in 3M™ Wrap Film Series 1080, a polishing product such as 3M™ Tire Restorer or Meguiar's® Natural Shine Protectant may be used. We do not recommend any polishing or wax product for the matt or textured films.

7. Store indoors or under cover whenever possible

Vinyl graphics (just like paint) are degraded by prolonged exposure to sun and atmospheric pollutants, particularly on the horizontal surfaces such as bonnet, boot lid and roof. Whenever possible, store in a garage or at least in a shaded area during the day. At night protect the car from dew or rain, which may contain acidic pollutants (a common problem in many large metropolitan areas). When a garage is not available, consider using a cloth car cover at night. If your graphics start to discolour or turn brown (which is caused by acidic pollution), immediately remove the graphics from the vehicle to avoid staining the underlying paint.

Commercial Graphics Department
3M United Kingdom PLC
3M Centre, Cain Road, Bracknell, Berkshire
RG12 8HT
Tel: 01344 857850
Fax: 01344 857939
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions

Commercial Graphics Department
3M United Kingdom PLC
3M House, 28 Great Jackson Street
Manchester M15 4PA
Tel: 0161 237 6394
Free Fax: 0800 378127
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions

Commercial Graphics Department
3M Ireland (Dublin)
The Iveagh Building
The Park, Carrickmines, Dublin 18, Ireland
Tel: 00 353 1 280 3555
Fax: 00 353 1 280 3509
e-mail: commgraphics.uk@mmm.com
www.3m.co.uk/graphicsolutions